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(MAY and August).

UPPER OTTAWA LANDFILL STUDY
CHEMICAL CHARACTERIZATION
BY
GC/MASS SPECTROMETRY

SUMBITTED TO : A. KOVEN

DATE : MAY 14, 1982

BY : MANN TESTING LABORATORIES LTD.

URBAN MUNICIPAL
APR 30 1987
GOVERNMENT DOCUMENTS

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I OVERVIEW

Mann Testing Laboratories Ltd. was contracted to conduct a comprehensive screen of organic compounds in and around the landfill site. Ten locations were identified as sampling sites from which liquid, sediment, or a combination of the two were secured. Sampling was conducted jointly by A. Koven of the Upper Ottawa Landfill Study and J. Martin of Mann Testing Laboratories.

Testing was conducted over the winter of 1981/82 at the laboratory situated in Rexdale, Ontario. Analytical procedures used were adopted from those published by the United States EPA and commonly referred to as "Priority Pollutant Analysis". Following sample extraction all analysis was conducted on a Finnigan 4023 GC/Mass Spectrometer at a sensitivity of approximately 1 ppb. Compound identification was by comparison to the EPA/NIH Library of 33,000 3,000 compounds resident in the GC/MS data system.

Approximately 1,000 compounds were determined at the ten sampling locations, the majority of these were non-toxic. Polynuclear aromatic hydrocarbons were found in abundance at certain sites and are likely attributable to the "cap" recently placed over the landfill. Redhill Creek does not pick up appreciable contamination as it flows past the landfill site even though

some amount of surface discharge into the creek was visible during sample collection. The creek is polluted prior to reaching the site. Halogenated compounds resulting from the landfill site were not found in significant numbers or amounts.

II SAMPLING PROCEDURES

Sample collection was conducted by A. Koven and J. Martin using clean glass sampling jars. Care was taken to take representative samples of water or sediments. Whenever possible samples were collected directly in the glass containers. Clean copper bailers were used to obtain water from boreholes. All samples were stored at 4°C until analysed.

A description of the sampling sites is shown schematically in diagram number 1 and further described in table number 1.

Diagram #1

Location of sampling sites

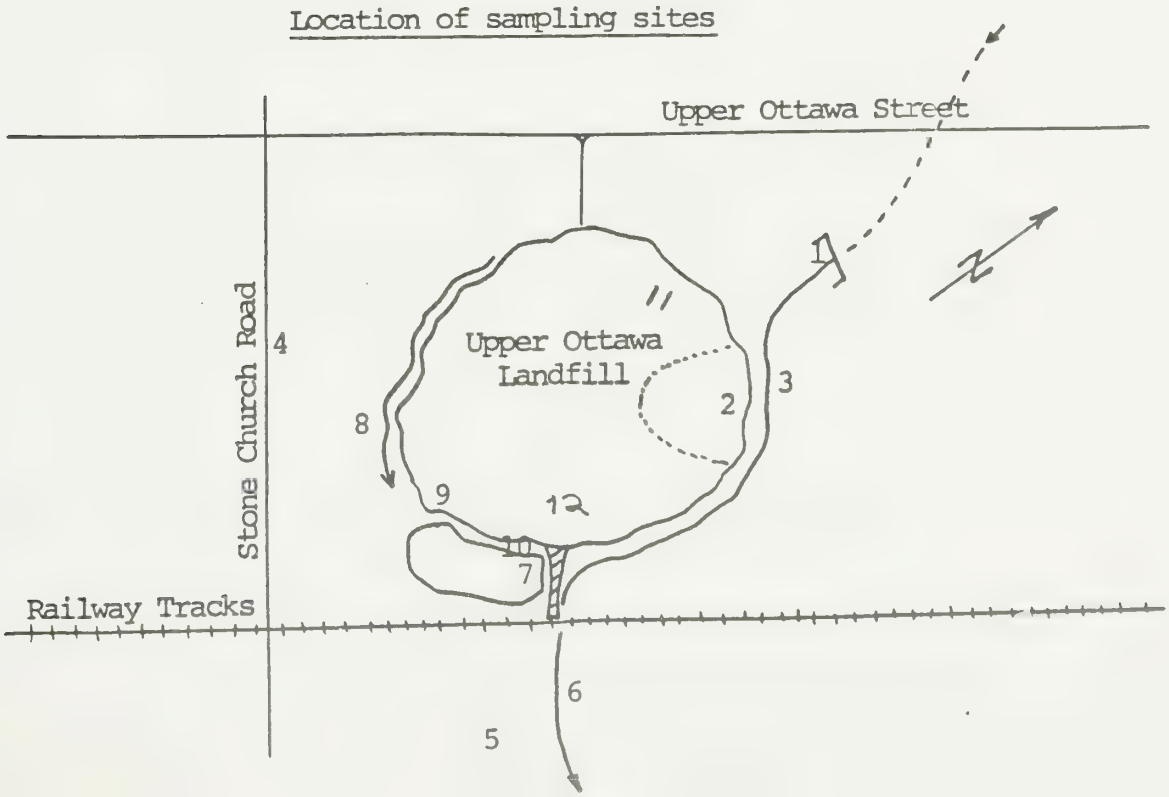

TABLE #1

DESCRIPTION OF SAMPLING SITES

Attached (Report) page	Mann Sample #	Name	Type	Location
1-8	1.n	Upstream	Water & Sediment	Redhill Creek at exit from underground. Fast water due to earlier rainfall.
9-11	2.n	Solid Leachate	Water	Leachate spring from NE side of dump near solidification site.
12-13	3.n	Solid, Sediment	Sediment	Sediment from Redhill Creek slightly up stream of solidification site.
14	4.n	Borehole #7-offsite	Water	Borehole offsite, SW of dump near fire tower Borehole nearly dry.
15-16	5.n	Borehole south of tracks	Water	Borehole in low area south of tracks; offsite.
17-23	6.n	Downstream	Water & Sediment	Redhill Creek south of tracks and about a hundred metres downstream from dump. Fast water due to earlier rainfall.
24-28	7.n	Blackhole	Water & Sediment	Blackhole at NE dam site.
29-33	8.n	Ditch S/W side	Water & Sediment	Drainage ditch around S/W side of dump.
34-37	9.n	Test Well on-site	Liquid	Borehole on landfill site near south end.
38-41	10.n	Culvert Leachate -pump	Water	South side of landfill, at newly installed pump
	11.	[illegible]	[illegible]	[illegible]
	12.	[illegible]	[illegible]	[illegible]

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III LABORATORY PROCEDURES

i) Water Sample Handling, Extraction and Analysis

The water samples were received in one litre bottles which were refrigerated at 4°C until extracted.

All glassware was washed throughly in soap water then rinsed with tap water, distilled water, glass distlled acetone and glass distilled methylene chloride.

One and a half litres (1.5 L) of sample was placed in a 2 L separatory funnel to which the internal standard was added. (see internal standard table) The water was made alkaline (pH > 12) with 6N NaOH to which 200 ml of methylene chloride was added. The separatory funnel was capped and shaken vigourously for 5 minutes. The two phases were allowed to separate, and the lower organic layer drained through pre-extracted anhydrous sodium sulphate and collected in a 500 ml round bottom flask. The water was then extracted twice again with 100 ml and 50 ml volumes of methylene chloride. These extracts were collected in the round bottom flask, and the solvent then evaporated using a roto-evaporator. When approximately 10 ml of solvent remained, the extract was transferred to a 15 ml test tube. The solvent was evaporated to the desired level and labelled "BASE-NEUTRAL" (BN) extract. The water in the separatory funnel was made acidic (pH < 2) with 6N HCl and extracted, as previously, with three volumes of methylene chloride (200 ml, 100 ml, 50 ml). This fraction was labelled the "ACID" extract.

The amount of sample injected depended upon the apparent concentration of contaminants.

Two separate capillary columns were used during this project; a 12 metre SE-54 and a 30 metre DB-5. The carrier gas of helium was maintained at 15 psi column head pressure. The oven temperature was programmed from 30°C - 280°C at 6 or 8 degrees per minute depending on the column.

All samples were run at 70 eV with a sensitivity of 10^{-7} amps/volt. The mass range of 34 - 450 amu was scanned once per second. Once all the data was acquired, an automatic computer controlled peak selection and library search program was run. This program works very well, yet still has a couple of "bugs" to be ironed out. The enhanced spectrum obtained by automatic background subtraction is searched against the 33,000 compounds in the EPA/NIH library. The three compounds with the highest purity values are listed. A perfect match of ions and relative intensities results in a purity value of 1000. However, in reality, where slightly less than ideal conditions prevail, several factors may contribute to the lower purity values. Poor peak resolution or separation will decrease the purity value. If the peak is small in absolute quantity, background noise may contribute ions that are not part of the spectrum, thereby lowering the assigned purity value. Finally, if the compound is not part of the NBS library, then the library choices are simply approximations or indications of the type or class of compound. The first choice is usually, but not always, the best match. Sometimes, none of the choices are relevant.

ii) Purge and Trap Analysis of Volatiles in Water

Five millilitres of water was spike with 100 nanograms of deuterated chlorobenzene (C_6D_5Cl) to 20 ppb. (sample #9, test-well on site, was very concentrated, thus only one ml was used for sparging). The mixture was then sparged for 20 minutes on the Unacon concentrator. The concentrated organics were then backflused onto a 50 metre Carbowax 20 M capillary column. The oven temperature was programmed from 50°C to 180°C at 6°C/minute. The eluants were analyzed by a Finnigan 3200 MS. The data was recorded and analyzed by the Incos Data System of the Finnigan 4023 GC/MS/DS. The peaks were automatically background subtracted and the mass spectra searched against the 33,000 compounds in the EPA/NIH library.

iii) Soil Sample Handling, Extraction and Analysis

The soil samples were received in 400 ml jars, which were refrigerated at 4°C until extracted. The soils or sediments contained a variety of artifacts which included water, dead and living vegetation, stones, peices of metal, rubber and wood, as well as a live worm in one. The fact that the worm was alive, indicated that biodegradation of organics was not halted by simply refrigerating the soils. Aproximately 100 grams of wet soil or sediment (weighed accurately) was placed in a 3 litre glass bottle and rolled overnight with 300 ml of solvent composed of 90:10 methylene chloride:acetone.

The solvent was filtered through anhydrous Na_2SO_4. The soil and filter were rinsed with 100 ml of methylene chloride. The solvent was poured into a two litre separatory funnel containing one litre of pH > 12 water. The lower organic phase was drained through a Na_2SO_4 filter. The extraction of the water was repeated with 100 ml of methylene chloride. The two extracts were combined, roto-evaporated and labelled the soil "BASE-NEUTRAL" (BN) extracts. The water was then made acidic with 6N HCl and extracted twice with methylene chloride (200 ml and 100 mls respectively). These extracts were roto-evaporated and labelled the soil "ACID" (A) extracts. In order to account for moisture in the soil, a scoop of wet soil was weighed, oven dried, then re-weighed to measure the dry weight of each sample.

The wet and dry weights of each sample extracted are listed below:

		Wet Weight (gm)	Dry Weight (gm)
#1	Upstream	110	79
#2	N.E. Stream	140	96
#6	Downstream	114	68
#7	Black Hole	124	94
#8	Ditch S.W. Side	99	79

One microlitre from 10 ml of each BN extract was injected directly onto the GC/MS. One microlitre from 2 ml of each acid extract was injected directly onto the GC/MS.

IV DATA REPORT FORMATS

i) GC/MS Summary Reports

A computer program was written by Mann Testing Laboratories Ltd. to summarize the data generated by the Incos data system. This program lists the computer choice of compound for each chromatographic peak above a prescribed total ion intensity. A detailed legend is give in diagram 2.

The comments section, with GC separation and match assignments, is a manual addition following study of each compound detected. In general a purity value greater than 800 is good indication that the compound selected by the computer is correct. Lighter molecular wight compounds, such as the volatiles determined by purge and trap methods, have fewer ions. A good match for these compounds would have a purity value in excess of 850.

ii) Summary of GC/MS Report Files

Table 2 lists the file numbers of each fraction analysed. A typical water sample analysis will have three fractions and thus three file numbers; one for the base-neutral extract, one for the acid extract and one for the purge and trap analysis.

It should be noted that file number 0857 consists of two computer passes at the Incos data file. The number of compounds identified in the fraction exceeded the capacity of the computer program.

Diagram 2

Description Report

```
QUANTITATION REPORT          FILE: 0650

DATA. 0650 TI
12/01/81 16 03:00
SAMPLE: WATER#1 UPSTREAM 1/150UL OF BASE/NEUTRAL EXT FROM 1500ML
CONDS.: 12M SE-54 30-280@8°C/MIN HOLD 15
FORMULA:                     INSTRUMENT: QT              WEIGHT:     0.000
SUBMITTED BY:                ANALYST: SH                 ACCT. NO.:

AMOUNT=AREA * REF. AMNT/(REF. AREA* RESP. FACT)

NO  NAME                          NO  M/E  SCAN  AMOUNT  Fit.  Sep.  Mat.  Comments
 1  METHANE, DICHLORO-             1  RIC   208  13.213  911                 extraction solvent
 2  2H-PYRAN-2-ONE                 2  RIC   296   1.288  873   G     F     ring struction
 3  D8-NAPTHALENE                  3  RIC   766   9.144 1000   G     G     internal std. @ 20 ppb
```

distinct file # for each fraction of the sample

IUPAC compound made from NBS Library (40 characters max.)

Peak number in chromatograph above set signal / noise ratio

Quantitation method RIC is same as TIC (total ion current). All ions produced in EI mode for that peak are summed together for total response

Any notes of interest on the compound detected.

Fit and purity values can sometimes be misleading and a visual inspection of the respective mass spectra is necessary, hence, the matches are visually graded, G (good), F (fair), P (poor).

Poor peak separation can adversely affect the fit or purity assigned, hence chromatograpic separation is graded G (good), F (fair), P (poor).

Fit or purity value calculated by computer to indicate how well the compound's mass spectrum matches that of the library choice. Matches are graded from 1000 (perfect) to below 500 (poor).

The highest peak in the chromatogram is normalized to 100%, all others are assigned % values relative to this.

Indicates scan number hence number of seconds required for compound to elute, as seen on chromatogram attached.

Table 2

Summary of Mass Spec Files-Mann Testing Labs

		Water			Soil	
Sample No.	Description	BN	Acid	P&T	BN	Acid
1	Upstream	0650	0655	0736	0857	0844
2	North Leachate	0653	0658	0739	—	—
3	NE Stream	—	—	—	0858	0845
4	Borehole by Firehall	—	—	—	—	—
5	Test Well-Offsite	0672	0676	0738	—	—
6	Downstream	0651	0656	0737	0859	0846
7	Blackhole	0661	0663	0740	0861	0848
8	Ditch-S/W Side	0662	0664	0742	0860	0847
9	Test Well-Onsite	0670	0671	0744	—	—
10	Culvert	1165	1166	0743	—	—

RESULTS AND DISCUSSION

i) General GC/MS

A great number of organic compounds were detected from the various sampling sites. Tables 3 and 4 summarize some of the categories and compounds of interest found in the water and soil samples respectively. Some potentially hazardous compounds were present at more than one location. These include phthalates, morpholines, benzothiazolone, phenols, quinolines, aromatic hydrocarbons and polyaromatic hydrocarbons (PAH).

The major toxic contaminants found in the soil and sediments were PCB's, pthalates and PAH's. The largest PAH found was anthracene. The larger ring systems were detected but in lower concentrations. The pattern is consistent with that of flyash, which is known to be part of the landfill. High levels of aliphatic hydrocarbons were detected in all soils and sediments. This class of compound probably originated from waste petroleum products and are relatively low toxicity. The volatile water contaminants detected comprised mainly of aliphatic and aromatic hydrocarbons which probably also originated from petroleum products. Other volatiles detected were tetrahydrofuran (THF), sulfur dioxide, carbon disulfide and dioxanes. Some of the other volatiles detected, ie. cyclohexene-1-ol, cyclohexene-1-one, acetone and dichloromethane are common laboratory contaminants found in the blank samples processed at the same time as the actual samples. Our experience has shown that the laboratory contaminants in particular methylene

Table 3

SUMMARY OF COMPOUNDS OF INTEREST FOUND IN WATER SAMPLES

Sample	PCB(ug/l)	Base Neutral	Acid	Purge & Trap	Radioactivity
1.n Upstream	ND	phthalates, H/C	phenols, amides	clean	negative
2.n Solid Leachate		alcohols	benzothiazolone	SO_2,THF,CH_2,Cl_2	negative
5.n Borehole south of tracks		morpholine, phosphates	alcohols,sulfur, H/C	CS_2,THF,SO_2,etc	negative
6.n Downstream	ND	phthalates	THF,phthalates, amides	clean	negative
7.n Blackhole		benzene methanols sulfur, phenols	acids, alcohols, amides, morpholine	sulfur,benzenes	negative
8.n Ditch S/W side		phosphates, H/C alcohols,isoquin-oline	benzothiazolone acids, esters	THF,benzenes, dioxanes	negative
9.n Test Well on-site	19.3	high H/C,High PAH	phenols, acids	high aromatics & aliphatic H/C	negative
10.n Culvert Leachate -pump		dibenzofuran,phenols isoquinoline,PAH, carbozole,Phthalates	phenols, acids, benzothiazolone	aromtic and aliphatic H/C	negative

Table 4

SUMMARY OF COMPOUNDS OF INTEREST FOUND IN SOIL SAMPLES

Sample	PCB (ug/g)	Base Neutral	Acid
1.n Upstream Sedmiment	0.09	H/C, phthalates, phenols	alcohols, phenols, phthalates
3.n Solid Sediment	0.18	phthalates, low PAH phosphates	benzothiazolone
6.n Downstream Sediment	0.07	high PAH	benzothiazolone, ketones, alcohols
7.n Blackhole Sediment	0.16	very high PAH	phenols
8.n Ditch S/W side Sediment	0.05	aliphatic H/C	benzothiazolone

choride, normally occur at the 10 ppb level.

Of significant importance is the lack of chlorinated compounds at the 10 sampling sites other than the trace levels of PCB's. Chlorinated organics are one of the most monitored class of organic poolutants due to the large number of these which have carcinogenic or mutagenic properties.

ii) PCB Analysis

Five sediment and three water samples were analyzed for polychlorinated biphenyls by Novalabs Ltd. of Montreal using Environment Canada methods. The detection limits were 0.01 ug/L for water and 0.01 ug/g for sediment. The results are listed below and Novalab's report is included as appendix B.

PCB in Water (ug/L)

Sample	Aroclor 1242	Aroclor 1254	Aroclor 1260
1 Upstream	ND	ND	NR
6 Downstream	ND	ND	NR
9 Test Well on-site		19.3	NR

PCB in Sediment (ug/g)

Sample	Aroclor 1242	Aroclor 1254	Aroclor 1260
1 Upstream	ND	NR	0.09
3 N.E. Stream	0.12	0.06	NR
6 Downstream	NR	NR	0.07
7 Blackhole	ND	0.16	NR
8 Ditch S.W. side	0.03	0.02	NR

ND - not detected

NR - not reported

iii) Radio Assay

A representative amount of each sample, approximatly 1 g, was added to a counting vial containing a liquid scintillation solution (Beckman EP solution). The instrument used was a Beckman LS 7000 with a maximum counting capacity of 5.6×10^6 CPM. This instrument was designed for counting soft-beta emitters such as ^3H, ^{14}C and ^{32}P. However virtually all alpha, beta and gamma emitters would be counted.

None of the samples submitted to the analysis showed any signs of radio activity.

RECOMMENDATIONS

The preliminary survey of water and soil samples from the landfill site has uncovered the presence of a large number of organic chemicals. A toxicological evaluation of the identified chemicals should be undertaken to determine if any of these represent a potential hazard to the local environment. Should any of the chemicals be determined potentially hazardous a quantitative monitoring of these should be undertaken. This would establish accurate levels, distribution and leaching rate from the site. The study may require a review of seasonal changes in chemical concentration due to elevated water levels which may introduce new contamination sources to the site leaching process.

NTITATION REPORT FILE: 0650

A: 0650.TI
01/81 16:05:00
PLE: WATER#1 UPSTREAM 1/150UL OF BASE/NEUTRAL EXT FROM 1500ML
DS.: 12M SE-54 30-280@8°C/MIN HOLD 15
MULA: INSTRUMENT: GT WEIGHT: 0.000
MITTED BY: ANALYST: SH ACCT. NO.: ANN KOVE

UNT=AREA * REF.AMNT/(REF.AREA* RESP.FACT)

	NAME	NO	M/E	SCAN	AMOUNT	Fit.	Sep.	Mat.	Comments
1	METHANE,DICHLORO-	1	RIC	208	13.213	911			extraction solvent
2	2H-PYRAN-2-ONE	2	RIC	296	1.288	873	G	F	ring struction
3	D8-NAPTHALENE	3	RIC	766	9.144	1000	G	G	internal std. @ 20 ppb
4	3-HEPTANONE,2,4-DIMETHYL-	4	RIC	1129	0.498	817	G	G	
5	BUTANOICACID,1-METHYLPROPYLESTER	5	RIC	1174	1.036	744	G	F	
6	HEPTANE,3-BROMO-		RIC	1371	0.559	680	G	P	
7	BUTANE,2,2-DIMETHYL-	7	RIC	1424	0.606	772	G	F	hydrocarbon
8	1-HEXENE,3,4,5-TRIMETHYL-	8	RIC	1593	49.218	828	G	F	unsaturated hydrocarbon
9	PENTANE,3-ETHYL-3-METHYL-	9	RIC	1770	1.978	803	F	F	hydrocarbon
10	BUTANE	10	RIC	1854	1.553	797	G	P	unknown
11	UNDECANE,2,4-DIMETHYL-	11	RIC	1929	1.021	792	F	F	hydrocarbon
12	BUTANE,2,2-DIMETHYL-	12	RIC	2083	0.828	804	G	F	hydrocarbon
13	1,2-BENZENEDICARBOXYLICACID,DIBUTYLESTER	13	RIC	2168	7.926	950	G	G	phthalate,plasticizer
14	BUTANE,2,2-DIMETHYL-	14	RIC	2229	0.625	806	G	F	hydrocarbon
15	BUTANE,2,2-DIMETHYL-	15	RIC	2370	0.637	798	G	F	hydrocarbon
16	DECANE,6-ETHYL-2-METHYL-	16	RIC	2505	0.716	788	G	F	hydrocarbon
17	BENZOICACID,4-AMINO-,2-(DIETHYLAMINO)ETH	17	RIC	2608	100.000	949	G	G	phthalate,plasticizer
18	DECANE,6-ETHYL-2-METHYL-	18	RIC	2761	0.978	781	G	F	hydrocarbon
19	PENTANE,2,2,3-TRIMETHYL-	19	RIC	2795	3.787	868	G	F	hydrocarbon
20	2-PENTENE,5-BROMO-2,3-DIMETHYL-	20	RIC	2869	1.239	807	F	F	
21	HEPTANE,5-ETHYL-2-METHYL-	21	RIC	2934	29.781	943	G	P	phthalate likely
22	BUTANE,2,2-DIMETHYL-	22	RIC	3111	0.710	786	G	F	hydrocarbon
23	6H-DIBENZO[B,D]PYRAN-1-OL,3-HEXYL-6A,7,8	23	RIC	3143	1.059	581	G	P	few ions,phthalate suspected
24	PENTANE,1,3-EPOXY-4-METHYL-	24	RIC	3220	0.504	705	G	F	
25	4-NONENE,5-NITRO-	25	RIC	3245	0.998	481	G	P	
26	BUTANE,2,2-DIMETHYL-	26	RIC	3330	0.609	769	G	F	hydrocarbon
27	PROPANOICACID,2,2-DIMETHYL-,2-(1,1-DIMET	27	RIC	3360	1.302	603	G	P	few ions,phthalate suspected

0655 11
'81 13:12:00
WATER #1 UPSTREAM 1/150UL ACID EXT OF 1500ML
IED BY: ANALYST: SH

T=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
FAC. FROM LIBRARY ENTRY

NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
2-CYCLOHEXEN-1-OL	1	RIC	211	5.207	884	G	G	unsaturated alcohol
2-CYCLOHEXEN-1-ONE	2	RIC	265	5.171	938	G	G	unsaturated ketone
PHENOL	3	RIC	407	1.050	804	G	F	
ETHANOL, 2,2'-OXYBIS-	4	RIC	415	1.072	930	P	G	diethylene glycol?wrong retention time
1,3-PROPANEDIAMINE	5	RIC	439	0.356	656	P	P	hydrocarbon
HEXANOICACID	6	RIC	483	0.392	749	G	G	caproic acid
BUTANOICACID	7	RIC	887	0.591	748	G	F	
1-HEXANOL, 4-METHYL-	8	RIC	1004	0.345	822	G	G	alcohol-possibly used in perfumes
2-OCTANONE	9	RIC	1042	4.019	891	P	G	hexyl methyl ketone
PENTANOICACID	10	RIC	1074	1.135	449	P	F	aliphatic acid
BUTANE, 2,2-DIMETHYL-	11	RIC	1138	1.221	741	G	F	hydrocarbon not dimethyl butone
PHENOL, 2-(1,1-DIMETHYLETHYL)-6-METHYL-	12	RIC	1169	1.485	788	F	G	
PROPANOICACID, 2-METHYL-, BUTYLESTER	13	RIC	1184	1.609	883	F	G	manuf. of fruit essences
1-OCTANOL	14	RIC	1202	1.347	915	G	G	manuf. of perfumes
DECANOICACID	15	RIC	1246	1.294	681	P	G	capric acid
DECANOICACID	16	RIC	1250	0.748				computer error
DODECANAL	17	RIC	1262	3.712	817	F	F	possibly hexadeconal
2-PROPANOL, 2-METHYL-	18	RIC	1308	0.577	745	F	F	alcohol-wrong retention time
DIISOAMYLENE	19	RIC	1377	12.456	704	G	F	hydrocarbon
NITRICACID, NONYLESTER	20	RIC	1412	0.801	623	G	P	unknown
1-PROPENE, 3-(1,1-DIMETHYLETHOXY)-	21	RIC	1493	2.944	608	F	P	unknown
1-HEXENE, 3,4,5-TRIMETHYL-	22	RIC	1599	23.888	714	G	P	unknown
2-DODECENAL	23	RIC	1729	3.120	699	P	F	alcohol or aldehyde?
HYDROXYLAMINE, O-DECYL-	24	RIC	1773	2.160	802	P	F	
PENTANE, 2,2,3,4-TETRAMETHYL-	25	RIC	1781	0.930	781	P	F	hydrocarbon
1-OCTANONE	26	RIC	1889	1.402	739	P	F	
PENTANOICACID, 4-METHYL-	27	RIC	1901	1.098	628	P	P	unknown
UNDECANE, 2,4-DIMETHYL-	28	RIC	1932	1.162	817	P	G	hydrocarbon
NITROUSACID, BUTYLESTER	29	RIC	1977	1.430	750	P	F	
1,2-BENZENEDICARBOXYLICACID, BUTYL2-METHYLPROPYLESTER	30	RIC	2032	1.811	803	G	G	phthalate
-DIOXIN, 2,3-DIHYDRO-5-METHYL-	31	RIC	2053	0.901	613	F	P	unknown
-PENT[illegible] ETHYL-4-METHYL-	32	RIC	2107	1.162	289	G	P	unknown
1,2-BENZENEDICARBOXYLICACID, DIBUTYLESTER	33	RIC	2164	9.700	884	P	G	phthalate
1,2-BENZENEDICARBOXYLICACID, DIBUTYLESTER	34	RIC	2180	51.040	927	F	G	phthalate
HEXADECANOICACID	35	RIC	2208	10.575	716	G	F	fatty acid
CYCLOPENTANEMETHANOL, .ALPHA., .ALPHA.-DIMETHYL-	36	RIC	2281	1.453	583	G	P	unknown
3-DECANOL	37	RIC	2294	0.837	621	F	P	unknown
1-HEPTANOL, 2-PROPYL-	38	RIC	2370	1.710	741	G	F	hydrocarbon alcohol
NONANAMINE	39	RIC	2459	7.548	541	G	P	amide
NONANAMIDE	40	RIC	2493	20.277	839	G	F	amide
3-HEXANOL, 2,5-DIMETHYL-, (S)-	41	RIC	2554	0.971	869	G	G	aliphatic alcohol
BUTANAL, OXIME	42	RIC	2584	2.727	697	G	F	
BENZENE, [(1,1-DIMETHYLETHOXY)METHYL]-	43	RIC	2679	1.305	618	G	P	phthalate
9-OCTADECENAMIDE, (Z)-	44	RIC	2733	100.000	587	G	P	amide
NONANAMIDE	45	RIC	2761	46.055	754	G	F	amide
PROPANOICACID, 2-HYDROXY-, BUTYLESTER	46	RIC	2800	0.766	620	P	F	unknown

NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
2-BUTANONE, 3-HYDROXY-3 METHYL-	47	RIC	2007	0.672	688	P	F	ketone?
1H-INDOLIZINO[8,7-B]INDOLE-2-PROPANOL, 2-ETHYL-2,3,5,6,11,11B-HEXAHYD	48	RIC	2030	0.800	526	G	P	unknown
1-HEPTADECANOL	49	RIC	2071	17.114	703	G	F	alcohol
1,2-BENZENEDICARBOXYLICACID, DIISOOCTYLESTER	50	RIC	2932	12.413	838	G	G	phthalate
UNDECANE, 2,4-DIMETHYL-	51	RIC	2794	1.176	776	G	F	hydrocarbon
DECANE, 2,4-DIMETHYL-	52	RIC	3107	1.260	789	G	G	hydrocarbon
PENTANAMIDE, 4-METHYL--	53	RIC	3189	0.384	626	G	F	not reasonable for retention time
1,5-HEPTADIENE, 2,3,6-TRIMETHYL--	54	RIC	3240	1.128	706	G	F	hydrocarbon mixture
UNDECANE, 2,4-DIMETHYL--	55	RIC	3320	0.636	724	G	F	hydrocarbon
HYDROXYLAMINE, O-DECYL-	56	RIC	3527	1.650	796	G	F	hydrocarbon

QUANTITATION REPORT FILE: 0736

DATA: 0736.TI
01/05/82 7:40.00
SAMPLE: UPSTREAM SAMPLE SPARGED
SUBMITTED BY: AC ANALYST: PB

AMOUNT=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	CYCLOPROPANE, 1,1-DIBROMO-2-CHLORO-2-FLUORO-
2	HYDRAZOICACID
3	PROPANAMIDE
4	METHANE, DICHLORO-
5	ETHANOL
6	PENTANE, 3,3-DIMETHYL-
7	BICYCLO[3.2.0]HEPTA-2,6-DIENE
8	ETHANOL, 2-NITRO-
9	BORANE, TRIMETHYL-
10	DEUTERO CHLORBENZENE
11	1-HEPTANOL
12	HYDROXYLAMINE, O-(2-METHYLPROPYL)-

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	72	0.770	960	G	G	one ion in spectra only-caution
2	RIC	317	0.763	952	G	G	very few ions
3	RIC	395	100.000	511	G	P	mixture of 2 components or system peak - unknown
4	RIC	448	1.524	448	G	G	lab air may contribute here
5	RIC	460	1.456	974	G	G	rye and water please
6	RIC	590	5.052	759	P	F	hydrocarbon & chloroform
7	RIC	642	1.764	843	P	F	toluene
8	RIC	651	2.966	617	P	P	system peak-ignore
9	RIC	734	1.202	846	G	G	
10	RIC	895	6.256	995	G	G	internal std. @ 20 ppb
11	RIC	1123	1.862	774	G	P	
12	RIC	1245	0.917	700	G	P	

QUANTITATION REPORT FILE: 0857

DATA: 0857.TI
02/15/82 11:13:00
SAMPLE: #1 UPSTREAM BN SOIL EXT 1/10000UL (79.6GRAMS)
CONDS.: 30-280@6°C/MIN HOLD 20 30M DB-5
FORMULA: INSTRUMENT: GT WEIGHT: 0.000
SUBMITTED BY: H&W ANALYST: SH ACCT. NO.: H&W

AMOUNT=AREA * REF.AMNT/(REF.AREA* RESP.FACT)

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	HEXANE, 3, 3-DIMETHYL-	1	RIC	1603	0.492	875	G	G	hydrocarbon
2	HEXANE, 3, 3-DIMETHYL-	2	RIC	1726	0.251	829	G	G	hydrocarbon
3	HEPTADECANE, 2, 6, 10, 14-TETRAMETHYL-	3	RIC	1734	0.256	864	G	G	hydrocarbon
4	ANTHRACENE	4	RIC	1826	0.592	956	G	G	PAH-may be carcinogenic
5	OCTANE, 2, 4, 6-TRIMETHYL-	5	RIC	1844	0.199	857	F	G	hydrocarbon
6	HYDROXYLAMINE, O-DECYL-	6	RIC	1855	0.255	789	F	F	hydrocarbon
7	OCTANE, 2, 4, 6-TRIMETHYL-	7	RIC	1957	0.264	713	F	F	hydrocarbon
8	OCTANE, 2, 4, 6-TRIMETHYL-	8	RIC	2067	0.266	836	G	G	hydrocarbon
9	SULFURDIOXIDE	9	RIC	2137	15.174	569	G	F	sulfur cmpd
10	HEPTADECANE	10	RIC	2167	0.221	836	G	G	hydrocarbon
11	PYRENE	11	RIC	2191	0.848	954	G	G	PAH-toxic, a carcinogenic agent
12	PYRENE	12	RIC	2196	0.360				
13	7-DODECEN-6-ONE	13	RIC	2191	0.848	378	P	P	
14	7-DODECEN-6-ONE	14	RIC	2196	0.362				
15	HEPTADECANE, 2, 6, 10, 14-TETRAMETHYL-	15	RIC	2300	0.247	848	G	G	hydrocarbon
16	PROPENE, 3-TERT-BUTOXY-2-(ISOPROPOXYMETHYL)-	16	RIC	2355	0.277	560	P	P	
17	PROPENE, 3-TERT-BUTOXY-2-(ISOPROPOXYMETHYL)-	17	RIC	2359	0.257				
18	DODECANE, 2-METHYL-	18	RIC	2355	0.425	810	P	G	hydrocarbon
19	DODECANE, 2-METHYL-	19	RIC	2359	0.272				
20	UNDECANE, 4, 7-DIMETHYL-	20	RIC	2377	0.339	696	P	F	hydrocarbon
21	1, 2-BENZENEDICARBOXYLICACID, DIHEXYLESTER	21	RIC	2404	0.525	648	P	F	phthalate-plasticizer
22	1-DECENE, 3, 4-DIMETHYL-	22	RIC	2452	2.549	548	G	P	
23	AKUAMMILAN-17-OL, 10-METHOXY-	23	RIC	2497	2.660	258	G	P	suggest as phthalate-plasticizer due to prominent 149
24	TRIPHENYLENE	24	RIC	2508	0.364	754	P	F	PAH-9,10-benzphenanthrene likely
25	TRIPHENYLENE	25	RIC	2518	0.407	832	P	F	PAH
26	7-HEPTADECANOL, 7-METHYL-	26	RIC	2525	0.493	562	P	P	
27	HEXADECANE	27	RIC	2538	0.557	704	P	F	hydrocarbon
28	HEXADECANE	28	RIC	2543	0.605				
29	1, 2-BENZENEDICARBOXYLICACID, DIISOOCTYLESTER	29	RIC	2538	0.557	672	P	F	phthalate-plasticizer
30	1, 2-BENZENEDICARBOXYLICACID, DIISOOCTYLESTER	30	RIC	2543	0.605	755	G	F	phthalate-plasticizer
31	1, 2-BENZENEDICARBOXYLICACID, DIISOOCTYLESTER	31	RIC	2595	100.000				
32	HEPTADECANE	32	RIC	2623	0.624	632	P	F	hydrocarbon
33	1, 2-BENZENEDICARBOXYLICACID, DIISOOCTYLESTER	33	RIC	2637	0.362	713	P	F	phthalate-plasticizer
34	1, 2-BENZENEDICARBOXYLICACID, DIISOOCTYLESTER	34	RIC	2664	12.546	810	G	G	phthalate-plasticizer
35	1, 2-BENZENEDICARBOXYLICACID, DIOCTYLESTER	35	RIC	2675	0.794	378	P	P	phthalate-plasticizer
36	NONANOL, TRIMETHYL-	36	RIC	2690	0.886	449	P	P	
37	NONANOL, TRIMETHYL-	37	RIC	2695	0.437				
38	1, 2-CYCLOHEXANEDIONE	38	RIC	2690	0.886	377	P	P	
39	1, 2-CYCLOHEXANEDIONE	39	RIC	2695	0.437				
40	HENEICOSANE	40	RIC	2705	0.868	568	P	P	suggest a hydrocaron-149 ion from plasticizer
41	1-DECENE, 3, 4-DIMETHYL-	41	RIC	2713	8.167	467	P	P	
42	1, 2-BENZENEDICARBOXYLICACID, DIISOOCTYLESTER	42	RIC	2752	81.597	795	G	G	phthalate-plasticizer
43	HYDROXYLAMINE, O-DECYL-	43	RIC	2795	1.354	589	F	F	suggest a hydrocarbon with phthalate interference agai
44	NONANE, 4-METHYL-5-PROPYL-	44	RIC	2807	0.992	518	F	P	phthalate interference
45	HYDROXYLAMINE, O-DECYL-	45	RIC	2843	8.601	330	G	P	phthalate interference
46	6H-DIBENZO[B, D]PYRAN-1-OL, 3-HEXYL-6A, 7, 8, 10A-TETRAHYDRO-6, 6, 9-TRIMET	46	RIC	2858	0.524	457	P	P	phthalate interference
47	OCTADECANE, 1-CHLORO-	47	RIC	2864	1.293	429	P	P	not chlorinated, phthalate interference

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
48	HYDROXYLAMINE, O-DECYL-	48	RIC	2876	2.195	483	F	P	hydrocarbon likely, phthalate interference
49	CYCLOBUTANEACETONITRILE, 1-METHYL-2-(1-METHYLETHYLIDENE)-	49	RIC	2900	1.715	298	F	P	phthalate interference
50	6H-DIBENZO[B,D]PYRAN-1-OL, 3-HEXYL-6A,7,8,10A-TETRAHYDRO-6,6,9-TRIMET	50	RIC	2914	4.542	540	P	P	phthalate interference
51	1-OXASPIRO[4.4]NON-8-ENE-4,7-DIONE, 9-HYDROXY-6-(3-METHYL-2-BUTENYL)-	51	RIC	2926	6.565	187	P	P	phthalate interference
52	1,2-BENZENEDICARBOXYLICACID, DIISOOCTYLESTER	52	RIC	2970	67.251	768	G	G	phthalate, plasticizer
53	6H-DIBENZO[B,D]PYRAN-1-OL, 3-HEXYL-6A,7,8,10A-TETRAHYDRO-6,6,9-TRIMET	53	RIC	2992	2.762	562	G	P	hydrocarbon likely, phthalate interference
54	PYRROLIDINE, 3-METHYL-	54	RIC	3007	1.009	257	F	P	phthalate ion (149) interfering still
55	1-HEPTANOL, 2-PROPYL-	55	RIC	3028	3.140	689	F	F	hydrocarbon
56	10-UNDECENOICACID, OCTYLESTER	56	RIC	3039	0.735	385	P	P	phthalate interfering ion (149)?
57	6H-DIBENZO[B,D]PYRAN-1-OL, 3-HEXYL-6A,7,8,10A-TETRAHYDRO-6,6,9-TRIMET	57	RIC	3060	0.981	595	P	P	phthalate interfering ion (149)?
58	ACETAMIDE, N-(P,.BETA.-DIHYDROXYPHENETHYL)-N-METHYL-, DIACETATE(ESTER)	58	RIC	3069	0.598	269	P	P	phthalate interfering ion (149)?
59	AZULENO[4,5-B]FURAN-2(3H)-ONE, DECAHYDRO-8,9-DIHYDROXY-6,9A-DIMETHYL-	59	RIC	3129	0.460	538	F	F	
60	2,10-DODECADIEN-1-OL, 3,7,11-TRIMETHYL-, (E)-	60	RIC	3140	0.480	450	F	P	phthalate suggested
61	KAURAN-18-AL, 17-(ACETYLOXY)-, (4.BETA.)-	61	RIC	3162	0.677	396	F	P	
62	HEPTADECANE	62	RIC	3179	0.677	788	F	F	hydrocarbon
63	CHOLESTA-8,24-DIEN-3-OL, 4-METHYL-, (3.BETA.,4.ALPHA.)-	63	RIC	3226	0.562	445	G	P	
64	HYDROXYLAMINE, O-DECYL-	64	RIC	3254	36.877	330	G	P	phthalate most likely
65	6H-DIBENZO[B,D]PYRAN-1-OL, 3-HEXYL-6A,7,8,10A-TETRAHYDRO-6,6,9-TRIMET	65	RIC	3275	1.703	674	F	P	phthalate most likely
66	6H-DIBENZO[B,D]PYRAN-1-OL, 3-HEXYL-6A,7,8,10A-TETRAHYDRO-6,6,9-TRIMET	66	RIC	3316	1.402	578	F	P	phthalate most likely
67	4-DECENE, 7-METHYL-, (E)-	67	RIC	3369	0.231	685	F	F	hydrocarbon
68	DODECANE, 1,2-DIBROMO-	68	RIC	3391	1.874	379	G	P	phthalate most likely
69	6H-DIBENZO[B,D]PYRAN-1-OL, 3-HEXYL-6A,7,8,10A-TETRAHYDRO-6,6,9-TRIMET	69	RIC	3433	0.803	502	G	P	phthalate most likely
70	1-OCTANOL, 2-BUTYL-	70	RIC	3475	6.536	334	G	P	phthalate most likely
71	UNDECANE, 3,7-DIMETHYL-	71	RIC	3601	0.318	786	F	F	hydrocarbon
72	PENTALENE, OCTAHYDRO-1-(2-OCTYLDECYL)-	72	RIC	3637	0.608	469	F	P	
73	DODECANE, 1,2-DIBROMO-	73	RIC	3689	9.351	325	G	P	phthalate most likely
74	2-PROPANONE, 1,1-DICHLORO-	74	RIC	3917	0.308	525	P	P	
75	BICYCLO[3.1.1]HEPTANE, 2,6,6-TRIMETHYL-	75	RIC	3930	0.167	516	P	P	

NOTE pieces of black rubber, etc. were found in soil samples and most likely contribute to the levels of phthalates in this sample.

UANTITATION REPORT · FILE: 0857

ATA: 0857.TI
2/15/82 11:13:00
AMPLE: #1 UPSTREAM BN SOIL EXT 1/10000UL (79.6GRAMS)
ONDS.: 30-280@6'C/MIN HOLD 20 30M DB-5
ORMULA: . INSTRUMENT: GT WEIGHT: 0.000
UBMITTED BY: ANALYST: SH ACCT. NO.: H&W

MOUNT=AREA * REF. AMNT/(REF. AREA* RESP. FACT)

NO	NAME
1	2-PENTANONE, 4-HYDROXY-4-METHYL-
2	BENZENE, 1, 2-DIMETHYL-
3	BENZENE, (2-CHLOROETHYL)-
4	CYCLOHEXENE, 3-METHYLENE-6-(1-METHYLETHYL)-
5	UNDECANE
6	BUTANE, 2, 2-DIMETHYL-
7	1-HEXANOL, 2-ETHYL-
8	DECANE, 1-CHLORO-
9	1-OCTANOL
10	HEXANE, 2, 4-DIMETHYL-
11	AZULENE
12	HEXANE, 2, 4-DIMETHYL-
13	HEPTANE, 2, 3, 6-TRIMETHYL-
14	ISOOCTANE, (ETHENYLOXY)-
15	HEXANE, 2, 4-DIMETHYL-
16	1-HEPTANOL, 2-PROPYL-
17	HEXANE, 3, 3-DIMETHYL-
18	HEXANE, 3, 3-DIMETHYL-
19	9-HEPTADECANOL
20	9-HEPTADECANOL
21	L-THREONINE, N-(TRIFLUOROACETYL)-, BUTYLESTER
22	1-HEPTANOL, 2-PROPYL-
23	HEXANE, 3, 3-DIMETHYL-
24	PHENOL, 2, 6-BIS(1, 1-DIMETHYLETHYL)-4-METHYL-

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	354	2.148	925			
2	RIC	388	0.068	849	P	G	alkylbenzene
3	RIC	388	0.068	585	P	P	interference from previous peak
4	RIC	609	0.187	894	G	G	cyclohexane itself is mod-toxic(300 ppm)
5	RIC	666	0.045	901	G	G	hydrocarbon
6	RIC	712	0.071	909	G	G	probably heavier hydrocarbon than C_6
7	RIC	732	0.586	917	F	G	alcohol
8	RIC	791	0.138	500	G	P	not chlorinated
9	RIC	809	0.180	890	G	G	alcohol
10	RIC	859	0.217	940	G	G	hydrocarbon
11	RIC	997	0.075	928	G	G	PAH
12	RIC	1030	0.147	925	G	G	probably heavier hydrocarbon than stated
13	RIC	1053	0.062	921	G	G	hydrocarbon
14	RIC	1146	0.187	917	G	G	hydrocarbon likely
15	RIC	1188	0.127	918	G	G	hydrocarbon
16	RIC	1301	0.084	872	G	G	hydrocarbon
17	RIC	1335	0.175	824	G	F	hydrocarbon
18	RIC	1340	0.033				computer error
19	RIC	1335	0.175	513			
20	RIC	1340	0.033				computer error
21	RIC	1403	0.047	389			
22	RIC	1422	0.164	685			
23	RIC	1472	0.276	893			
24	RIC	1493	0.127	816			

ITATION REPORT FILE: 0844

0844.TI
1/82 9:49:00
.E: #1 UPSTREAM SOIL ACID EXT 1/2000UL
I.: 30-280@6'C/MIN HOLD 25 30M DB-5
/LA: . INSTRUMENT: QT WEIGHT: 0.000
ITTED BY: A. KOVEN ANALYST: SH ACCT. NO.: VOSLSS

IT=AREA * REF.AMNT/(REF.AREA* RESP.FACT)

NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Pur.	Comments
METHANE, DICHLORO-	1	RIC	204	100.000	910	-	-	extraction solvent
HYDROPEROXIDE, 1-METHYLETHYL	2	RIC	372	0.068	719	G	P	
2-PENTANONE, 4-HYDROXY-4-METHYL-	3	RIC	420	24.133	983	G	G	product of extraction method
BUTANE	4	RIC	548	0.093	836	G	F	
1-PROPENE, 1-PROPOXY-, (Z)-	5	RIC	627	0.072	810	G	F	propenypropyl ether also likely
BUTANE	6	RIC	676	0.098	776	G	F	2-propenylester acitic acid likely
BUTANE, 1-CHLORO-2-METHYL-	7	RIC	757	0.057	799	F	P	
BUTANE, 1-CHLORO-2-METHYL-	8	RIC	762	0.130				
1-PENTANOL, 2-ETHYL-4-METHYL-	9	RIC	757	0.060	843	F	F	alcohol
1-PENTANOL, 2-ETHYL-4-METHYL-	10	RIC	762	0.144				
1,1-CYCLOPROPANEDICARBONITRILE, 2-METHYL-2-PROPYL-	11	RIC	836	0.255	339	G	P	
1-HEPTANOL, 6-METHYL-	12	RIC	1155	0.046	880	G	G	alcohol
1,2-BENZENEDICARBOXYLICACID, MONOBUTYLESTER	13	RIC	2029	0.238	312	G	P	phthalate likely due to strong 149 ion
SULFURDIOXIDE	14	RIC	2114	0.388	523	G	P	sulfur compound
HEXANE, 3,3-DIMETHYL-	15	RIC	2168	0.064	802	G	G	hydrocarbon
PHENOL, 4,4'-(1-METHYLETHYLIDENE)BIS-	16	RIC	2245	0.123	743	G	G	manuf. of epoxy resins & polycarbonates;fungicide
HEXANE, 3,3-DIMETHYL-	17	RIC	2266	0.027	808	G	G	hydrocarbon
CYCLOHEXANECARBOXYLICACID, 1-OCTYL-, METHYLESTER	18	RIC	2286	0.227	437	G	P	
1-NONENE, 4,6,8-TRIMETHYL-	19	RIC	2360	0.032	816	G	G	hydrocarbon
1-HEXENE, 3,5,5-TRIMETHYL-	20	RIC	2451	0.056	710	G	P	
1-HEXENE, 3,5,5-TRIMETHYL-	21	RIC	2497	0.050	227	G	P	
OCTANE, 2-BROMO-	22	RIC	2537	0.029	619	G	P	
AKUAMMILAN-17-OL, 10-METHOXY-	23	RIC	2576	0.387	196	P	P	phthalate suspected
1,2-BENZENEDICARBOXYLICACID, DIISOOCTYLESTER	24	RIC	2584	5.743	821	F	G	phthalate;plasticizer
1-HEPTENE, 5-METHYL-	25	RIC	2660	0.317	291	G	P	phthalate suspected
1-DECENE, 2,4-DIMETHYL-	26	RIC	2710	0.133	588	F	P	
1,2-BENZENEDICARBOXYLICACID, DIISOOCTYLESTER	27	RIC	2736	3.965	861	G	G	phthalate;plasticizer
AKUAMMILAN-17-OL, 10-METHOXY-	28	RIC	2833	0.162	336	F	P	phthalate suspected
1-DECENE, 3,4-DIMETHYL-	29	RIC	2905	0.946	426	G	P	
1,2-BENZENEDICARBOXYLICACID, DIISOOCTYLESTER	30	RIC	2937	5.375	830	G	G	phthalate;plasticizer
1-HEPTANOL, 2-PROPYL-	31	RIC	3218	0.706	224	G	P	phthalate suspected

QUANTITATION REPORT FILE: 0653

DATA: 0653.TI
12/02/81 11:06:00
SAMPLE: WATER#2 NORTH LEACHATE 1/150UL BN EXT OF 1500ML
SUBMITTED BY: ANALYST: SH

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	2-BUTANONE, 4-HYDROXY-3-METHYL-
2	PENTANE, 2-BUTOXY-
3	CYCLOPENTANE, METHYLENE-
4	CYCLOPENTANE, METHYLENE-
5	BENZENEACETICACID, . ALPHA. -HYDROXY-. ALPHA. -METHYL-
6	BENZENEACETICACID, . ALPHA. -HYDROXY-. ALPHA. -METHYL-
7	BICYCLO[2. 2. 1]HEPTAN-2-OL, 3, 3-DIMETHYL-
8	BICYCLO[2. 2. 1]HEPTAN-2-OL, 3, 3-DIMETHYL-
9	1, 3, 5-TRIOXANE, 2-(1, 1-DIMETHYLETHYL)-
10	D8-NAPTHALENE
11	PYRIDINE, PENTAFLUORO-
12	2, 4-IMIDAZOLIDINEDIONE, 1-METHYL-
13	2-OXAZOLIDINONE, 3-(2-HYDROXYPROPYL)-5-METHYL-
14	PENTANE, 1-(1-METHYLETHOXY)-
15	PHOSPHORICACIDTRIBUTYLESTER
16	1-TETRADECANAMINE
17	1-TETRADECANAMINE
18	1H-PYRROLE-2-CARBOXYLICACID, 1-ETHENYL-
19	1H-PYRROLE-2-CARBOXYLICACID, 1-ETHENYL-
20	TRISILANE
21	PYRIDINE, 4-(METHYLTHIO)-
22	PROPANE, 1, 1'-SULFONYLBIS[2-METHYL-
23	2, 5-HEPTADIEN-1-OL, 6-METHOXY-3-METHYL-, ACETATE
24	2-PROPANOL, 1-(1-METHYLPROPOXY)-
25	ETHANOL, 2-[2-(2-BUTOXYETHOXY)ETHOXY]-
26	2-PROPANOL, 1-(1-METHYLPROPOXY)-
27	BUTANE, 1-(ETHENYLOXY)-
28	1, 2-BENZENEDICARBOXYLICACID, DIISOOCTYLESTER
29	1, 3-HEPTADIENE, 3-ETHYL-2-METHYL-
30	3, 7, 11-TRIDECATRIENENITRILE, 4, 8, 12-TRIMETHYL-
31	2-PROPANOL, 1-(1-METHYLPROPOXY)-
32	HYDROXYLAMINE, O-DECYL-
33	UNDECANE, 2, 10-DIMETHYL-
34	PREGN-5-EN-20-ONE, 21-(ACETYLOXY)-3-HYDROXY-, (3. BETA.)-
35	OCTACOSANE
36	HYDROXYLAMINE, O-DECYL-
37	ERGOSTA-7, 22-DIEN-3-OL, (3. BETA. , 22E)-
38	ETHANONE, 1-(1, 3A, 4, 5, 6, 7-HEXAHYDRO-4-HYDROXY-3, 8-DIMETHYL-5-AZULENYL
39	UNDECANE, 3, 8-DIMETHYL-
40	DECANE, 2, 3, 8-TRIMETHYL-
41	1H-BENZOCYCLOHEPTEN-7-OL, 2, 3, 4, 4A, 5, 6, 7, 8-OCTAHYDRO-1, 1, 4A, 7-TETRAME

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Match	Comments
1	RIC	221	3.420	307	P	P	
2	RIC	445	1.253	668	P	F	
3	RIC	477	2.402	590	P	P	
4	RIC	481	1.966				computer error
5	RIC	628	2.095	600	P	F	
6	RIC	632	1.530	359	P	P	poor separation with previous peak
7	RIC	628	2.095				repeat analysis-program error
8	RIC	632	1.530				repeat analysis-program error
9	RIC	716	6.009	575	G	P	
10	RIC	764	18.585	807	G	G	internal std @ 20 ppb
11	RIC	1545	28.488	328	P	P	peaks 11,12,13 poorly separated
12	RIC	1559	47.279	662	P	P	peaks 11,12,13 poorly separated
13	RIC	1559	35.772	723	P	F	peaks 11,12,13 poorly separated
14	RIC	1613	19.992	654	F	F	
15	RIC	1761	10.199	777	F	G	n-butylphosphate, found in rubbers, etc.
16	RIC	1827	4.966	226	P	P	
17	RIC	1832	2.758	255	P	P	
18	RIC	1827	6.962				repeat analysis-program error
19	RIC	1832	7.499				repeat analysis-program error
20	RIC	1947	20.512	391	P	P	
21	RIC	1943	4.745	200	P	P	
22	RIC	1956	13.606	286	P	P	
23	RIC	2338	5.309	304	F	P	
24	RIC	2459	8.038	571	G	F	
25	RIC	2489	100.000	638	G	F	
26	RIC	2716	5.080	634	G	F	
27	RIC	2834	22.217	413	G	P	
28	RIC	2948	7.986	820	G	G	plasticizer
29	RIC	3162	8.808	428	G	P	
30	RIC	3244	1.178	606	G	P	2nd & 3rd choices also possible
31	RIC	3308	2.654	581	F	P	
32	RIC	3325	2.640	775	F	G	
33	RIC	3427	1.912	823	G	G	
34	RIC	3506	4.654	449	G	P	
35	RIC	3530	1.806	829	G	G	hydrocarbon
36	RIC	3636	1.381	806	G	G	hydrocarbon pattern prevalent
37	RIC	3656	3.087	443	G	P	
38	RIC	3715	2.670	349	G	P	
39	RIC	3743	1.065	712	F	F	hydrocarbon suggested
40	RIC	3854	1.094	780	F	F	hydrocarbon
41	RIC	3890	0.867	426	G	P	

[illegible]

A: [illegible]
03/81 15:54:00
PLE: MATERIAL NORTH SIDE LEACHATE SPRING 1/1500UL ACID EXT
MITTED BY: ANALYST: SH

OUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
P. FAC. FROM LIBRARY ENTRY

	NAME
	METHANE, DICHLORO-
	METHANE, DICHLORO-
	CYANICACID, 2-METHYLPROPYLESTER
	CYANICACID, 2-METHYLPROPYLESTER
	1-PENTENE, 4-METHYL-
	HEXANOICACID, 3, 5, 5-TRIMETHYL-
	PENTANE, 1-PROPOXY-
	3-HEPTANOL, 3, 6-DIMETHYL-
	2H-PYRAN-2, 3-DIOL, TETRAHYDRO-, DIACETATE, TRANS-
	3-AZETIDINOL, 1-(1, 1-DIMETHYLETHYL)-
	THIOCYANICACID, BUTYLESTER
	1, 3-DIOXANE, 2, 4, 6-TRIMETHYL-, (2. ALPHA., 4. ALPHA., 6. ALPHA.)-
	MORPHOLINE, 3-METHYL-2-PHENYL-
	MORPHOLINE, 3-METHYL-2-PHENYL-
	2, 6-ADAMANTANEDIONE, 4-IODO-, (1R)-
	2, 6-ADAMANTANEDIONE, 4-IODO-, (1R)-
	PENTANE, 1-PROPOXY-
	2(3H)-BENZOTHIAZOLONE
	AKUAMMILAN-17-OL, 10-METHOXY-
	BENZLUR, 1-METHYL-2-(1-ETHYLPROPYL)-
	9-OCTADECENAMIDE, (Z)-
	PENTANAMIDE

NO	M/E	[illegible]	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	206	3.912	878	G	G	solvent from injection
2	RIC	210	5.457				
3	RIC	206	3.981	444	P	P	from solvent
4	RIC	210	6.358				
5	RIC	757	3.827	892	G	G	
6	RIC	818	13.532	800	G	G	
7	RIC	1125	22.943	570	P	P	unknown
8	RIC	1155	12.682	507	P	P	chain alcohol
9	RIC	1187	14.023	696	F	F	
10	RIC	1273	100.000	543	G	P	unknown
11	RIC	1342	10.352	374	P	P	unknown
12	RIC	1342	10.352	708	P	F	
13	RIC	1474	7.848	327	P	P	unknown
14	RIC	1478	4.775				
15	RIC	1474	5.290	701	P	F	C_5-benzoic acid
16	RIC	1478	3.888				
17	RIC	1589	21.878	637	G	P	
18	RIC	1740	22.341	785	G	G	2(3H)-benzothiazolone
19	RIC	2160	7.090	116	G	P	phthalate
20	RIC	2686	3.437	610	G	F	C_7-benzene
21	RIC	2704	20.683	723	G	G	
22	RIC	2739	4.237	785	G	G	

QUANTITATION REPORT FILE: 0739

DATA: 0739.TI
01/09/82 13:28:00
SAMPLE: SOLIDIFICATION LEACHATE SPARGE
SUBMITTED BY: AC ANALYST: PB

AMOUNT=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	ETHANE,1,1'-OXYBIS-	1	RIC	142	0.816	806	G	F	ethylether;anesthetic,solvent for waxes, etc.
2	FORMAMIDE,N-(2-METHYLPROPYL)-	2	RIC	320	100.000	665	G	P	common system peak
3	SULFURDIOXIDE	3	RIC	363	0.847	944	G	G	
4	FURAN,TETRAHYDRO-	4	RIC	396	30.899	987	G	G	hi-toxic(200 ppm) solvent for adhesives, inks, etc,
5	METHANE,DICHLORO-	5	RIC	468	15.074	943	G	G	common lab solvents
6	2-PROPANONE,1,1-DICHLORO-	6	RIC	612	1.482	601	G	F	
7	1,3,5-CYCLOHEPTATRIENE	7	RIC	663	5.759	925	F	F	toluene
8	1,4-DIOXANE	8	RIC	703	1.337	887	G	G	hi-toxic (100ppm) solvent for paints, etc.
9	BUTANENITRILE	9	RIC	756	1.089	807	G	F	few ions, hi-toxic
10	DEUTERO CHLORBENZENE stand	10	RIC	922	12.172	820	G	F	internal std. @ 20 ppb
11	PROPANE,1-(ETHENYLOXY)-2-METHYL-	11	RIC	1143	1.681	760	G	F	
12	ACETICACID	12	RIC	1164	1.570	777	G	F	

QUANTITATION REPORT . FILE: 0858

DATA: 0858.TI
02/15/82 12:54:00
SAMPLE: #2 N.E. STREAM BN SOIL EXT 0.5/10000UL (96.3 GRAMS)
CONDS.: 30-280@6'C/MIN HOLD 20 30M DB-5
FORMULA: INSTRUMENT: GT WEIGHT: 0.000
SUBMITTED BY: A.KOVEN ANALYST: SH ACCT. NO.: UOSLSS

AMOUNT=AREA * REF.AMNT/(REF.AREA* RESP.FACT)

NO	NAME
1	METHANE,DICHLORO-
2	ETHANOL,2-METHOXY-,ACETATE
3	PENTANAL,2,2-DIMETHYL-
4	2-PENTANONE,4-HYDROXY-4-METHYL-
5	1-PENTANOL,2-ETHYL-4-METHYL-
6	BUTANE,2,2-DIMETHYL-
7	OCTANE,2,7-DIMETHYL-
8	PENTANE,3-ETHYL-2,3-DIMETHYL-
9	ACENAPHTHYLENE,1,2-DIHYDRO-
10	HEXANE,3,3-DIMETHYL-
11	PHENOL,2,6-BIS(1,1-DIMETHYLETHYL)-4-METHYL-
12	HEXANE,3,3-DIMETHYL-
13	ISOOCTANE,(ETHENYLOXY)-
14	ANTHRACENE
15	ANTHRACENE
16	1-HEPTANOL,2-PROPYL-
17	1,2-BENZENEDICARBOXYLICACID,BUTYL2-METHYLPROPYLESTER
18	SULFURDIOXIDE
19	PYRENE
20	PYRENE
21	ETHANONE,1,1'-(6-HYDROXY-2,7-BENZOFURANDIYL)BIS-
22	CARBONICACID,DINEOPENTYLESTER
23	TRIDECANE,1-IODO-
24	1-DECENE,3,4-DIMETHYL-
25	TRIDECANOL
26	1,2-BENZENEDICARBOXYLICACID,DIISOOCTYLESTER
27	PHOSPHORICACID,TRIOCTYLESTER
28	1-DECENE,3,4-DIMETHYL-
29	PHOSPHORICACID,TRIOCTYLESTER
30	PHOSPHORICACID,TRIOCTYLESTER
31	OCTANE,1,1'-OXYBIS-
32	OCTADECANE,1-(ETHENYLOXY)-
33	PENTALENE,OCTAHYDRO-1-(2-OCTYLDECYL)-
34	PENTALENE,OCTAHYDRO-1-(2-OCTYLDECYL)-
35	HEXANE,1-(ISOPROPYLIDENECYCLOPROPYL)-
36	PENTALENE,OCTAHYDRO-1-(2-OCTYLDECYL)-
37	OCTANE,2,4,6-TRIMETHYL-
38	TRICYCLO[4.3.0.07,9]NONANE,2,2,5,5,8,8-HEXAMETHYL-,(1.ALPHA.,6.BETA.
39	ANTHRACENE,9-DODECYLTETRADECAHYDRO-
40	BUTANENITRILE,3-METHYL-
41	KAURAN-18-AL,17-(ACETYLOXY)-,(4.BETA.)-
42	6H-DIBENZO[B,D]PYRAN-1-OL,3-HEXYL-6A,7,8,10A-TETRAHYDRO-6,6,9-TRIMET
43	3-PYRIDINOL,2-METHYL-
44	3-OCTYNE,2-METHYL-

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	339	2.095	832			extraction solvent
2	RIC	362	0.193	792	F	F	
3	RIC	362	0.221	727	F	P	
4	RIC	410	56.100	978	G	G	diacetone alcohol produced druing extraction
5	RIC	753	0.954	911	G	G	
6	RIC	1194	0.059	773	G	F	hydrocarbon
7	RIC	1339	0.122	870	G	G	hydrocarbon
8	RIC	1426	0.104	774	G	F	hydrocarbon
9	RIC	1457	0.119	860	G	G	acenophthene;dyes,plastics,insecticide,fungicide
10	RIC	1476	0.224	897	G	G	hydrocarbon
11	RIC	1498	0.459	737	G	F	phenol base
12	RIC	1607	0.481	845	G	G	hydrocarbon
13	RIC	1730	0.317	889	G	G	hydrocarbon
14	RIC	1830	2.126	976	G	G	PAH, mfr. of dyes
15	RIC	1841	0.767	946	F	G	PAH, mfr. of dyes
16	RIC	1848	0.458	651	F	F	
17	RIC	2033	0.690	899	G	G	plasticizer
18	RIC	2126	34.552	587	G	P	sulfur cmpd. likely
19	RIC	2140	2.593	960	G	G	PAH
20	RIC	2194	1.879	950	G	G	PAH
21	RIC	2200	0.380	598	F	F	
22	RIC	2358	1.382	550	F	P	
23	RIC	2364	0.278	670	F	F	hydrocarbon
24	RIC	2456	2.714	572	G	P	
25	RIC	2546	1.572	545	F	P	
26	RIC	2590	59.880	805	G	G	plasticizer
27	RIC	2609	2.026	365	G	P	
28	RIC	2632	7.955	394	P	P	
29	RIC	2645	7.624	279	P	P	
30	RIC	2658	100.000	293	P	P	
31	RIC	2717	21.614	493	G	P	
32	RIC	2904	0.842	640	F	P	
33	RIC	2948	1.798	323	F	P	
34	RIC	3030	0.669	688	F	F	unsat. hydrocarbon ?
35	RIC	3063	0.405	631	P	F	unsat. hydrocarbon ?
36	RIC	3130	0.985	478	G	P	
37	RIC	3184	0.454	792	G	F	hydrocarbon
38	RIC	3267	0.519	629	G	F	hydrocarbon
39	RIC	3461	0.215	574	G	F	
40	RIC	3544	0.930	550	F	F	
41	RIC	3643	0.759	433	G	P	
42	RIC	3687	0.492	549	G	F	
43	RIC	3924	0.336	359	P	P	
44	RIC	3930	0.299	398	P	P	

QUANTITATION REPORT FILE: 0845

DATA: 0845.TI
02/11/82 11:11:00
SAMPLE: #2 N.E. STREAM SEDIMENT ACID EXT 1/2000UL
CONDS.: 30-280@6'C/MIN HOLD 25 30M DB-5
FORMULA: INSTRUMENT: GT WEIGHT: 0.000
SUBMITTED BY: A. KOVEN ANALYST: SH ACCT. NO.: VOSLBS

AMOUNT=AREA * REF.AMNT/(REF.AREA* RESP.FACT)

NO	NAME
1	METHANE,DICHLORO-
2	METHANE,DICHLORO-
3	2-PROPANONE
4	2(3H)-BENZOTHIAZOLONE
5	6H-DIBENZO[B,D]PYRAN-1-OL,3-HEXYL-6A,7,8,10A-TETRAHYDRO-6,6,9-TRIMET

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	203	100.000	914			extraction solvent
2	RIC	243	34.497	881			extraction solvent
3	RIC	378	0.060	785	G	F	
4	RIC	1693	0.048	791	G	G	seen many times
5	RIC	2591	0.122	808	G	F	phthalate suspected

QUANTITATION REPORT FILE: 0738

DATA: 0738.TI
01/05/82 12:18:00
SAMPLE: TEST WELL OFFSITE PAST SIDE
SUBMITTED BY: AC ANALYST: PB

AMOUNT=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Set.	Mat.	Comments
1	PROPANE	1	RIC	77	0.315	352	G	P	single ion-ignore
2	ETHANE,1,1'-OXYBIS-	2	RIC	154	0.090	877	G	G	ethylether; anesthetic, solvent for waxes, perfumes etc.
3	CARBONDISULFIDE	3	RIC	244	0.485	866	G	G	toxic solvent
4	PENTANE,2-METHOXY-	4	RIC	338	100.000	584	G	P	common system peak
5	SULFURDIOXIDE	5	RIC	369	0.435	715	F	F	
6	FURAN,TETRAHYDRO-	6	RIC	421	2.739	910	G	G	solvent
7	ACETICACIDETHYLESTER	7	RIC	445	0.770	955	F	G	
8	3-PENTANOL	8	RIC	452	0.273	794	F	F	
9	METHANE,DICHLORO-	9	RIC	490	1.227	930	G	G	common lab solvent
10	BENZENE	10	RIC	530	0.267	877	G	G	toxic, solvent for waxes,oils,etc.
11	1,3-DIOXOLANE,4-METHYL-	11	RIC	563	0.101	865	G	G	
12	AZIRIDINE,1-METHYL-	12	RIC	662	0.184	505	P	P	
13	1,3,5-CYCLOHEPTATRIENE	13	RIC	671	0.499	915	P	G	toluene
14	BUTANENITRILE	14	RIC	757	0.277	840	G	G	hi-toxic
15	1,6-HEPTADIYNE	15	RIC	796	0.096	726	G	F	
16	ETHANONE,1-(2-METHYL CYCLOPROPYL)-	16	RIC	812	0.258	861	P	G	
17	BENZENE,ETHYL	17	RIC	817	0.235	835	P	F	C_2-benzene
18	HEXANAL,3-METHYL	18	RIC	875	0.214	766	G	F	
19	BENZENE,ETHYL	19	RIC	881	0.143	881	F	F	C_2-benzene
20	DEUTERO CHLOROBENZENE	20	RIC	915	1.680	971	G	G	internal std @ 20 ppb
21	HEPTANAL	21	RIC	1130	0.755	876	G	F	

#5 15

QUANTITATION REPORT FILE: 0672

DATA: 0672.TI
12/08/91 11:46:00
SAMPLE: WATER#5 BASE-NEUT 0.5/2000UL
SUBMITTED BY: ANALYST: SH

AMOUNT=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	METHANE,DICHLORO-	1	RIC	206	29.996	859			extraction solvent
2	PHOSPHORICACID,TRIETHYLESTER	2	RIC	687	3.249	786	G	G	
3	MORPHOLINE,3,5-DIMETHYL-4-NITROSO-	3	RIC	1246	27.308	711	G	F	morpholine base
4	BUTANOICACID,ETHENYLESTER	4	RIC	1592	3.381	826	G	G	other computer choices good
5	3-PENTANOL	5	RIC	1734	3.421	756	G	F	alcohol
6	SULFURDIOXIDE	6	RIC	2208	100.000	788	G	P	not sulfur dioxide, wrong retention time

)UANTITATION REPORT FILE: 0676

)ATA: 0676.TI
2/08/81 16:36:00
:AMPLE: WATER #5 ACID EXT 1/2000UL
:UBMITTED BY: ANALYST: STAN

MOUNT=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
'ESP. FAC. FROM LIBRARY ENTRY

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	METHANE, DICHLORO-	1	RIC	213	12.623	855			extraction solvent
2	ETHANOL, 2-NITRO-, PROPIONATE(ESTER)	2	RIC	697	4.044	683	G	P	
3	CYCLOPENTANE, METHYL-	3	RIC	730	11.094	549	G	F	cyclic hydrocarbon
4	ETHANONE, 1-CYCLOBUTYL-	4	RIC	793	10.182	422	G	P	
5	PENTANE, 2-ISOCYANO-2,4,4-TRIMETHYL-	5	RIC	811	3.494	681	G	F	
6	1-BUTANOL, 3-METHYL-, ACETATE	6	RIC	1107	1.425	512	F	P	
7	AZIRIDINE, 2,3-DIMETHYL-1-(PHENYLMETHYL)-, TRANS-	7	RIC	1246	8.147	497	F	P	
8	BENZOICACID, 4-(1,1-DIMETHYLETHYL)-	8	RIC	1490	7.266	750	F	F	fatty acid, Phenol 2nd choice
9	BUTANOICACID, 3-METHYL-2-OXO-, METHYLESTER	9	RIC	1590	9.640	676	F	F	fatty acid
10	2-BUTEN-1-ONE, 1-(1,4-DIHYDROXY-2,6,6-TRIMETHYL-2-CYCLOHEXEN-1-YL)-, [	10	RIC	2031	7.618	611	G	F	
11	SULFUR, MOL. (S8)	11	RIC	2199	100.000	704	G	G	sulfur cmpd

TA: 0651.TI
/02/01 9:05 00
NPLE: WATER#6 DOWNSTREAM 1/150UL OF B/N EXT FROM 1500ML
BMITTED BY: ANALYST: SH

OUNT=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
SP. FAC. FROM LIBRARY ENTRY

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	METHANE, DICHLORO-	1	RIC	214	32.125	786	G	G	extraction solvent
2	2-CYCLOHEXEN-1-ONE	2	RIC	305	2.302	844	G	G	
3	9,10-SECOCHOLESTA-5,7,10(19)-TRIENE-3,24,25-TRIOL,(3.BETA.,5Z,7E)-	3	RIC	778	1.657	104	G	P	matching error
4	PENTANOICACID	4	RIC	1057	1.896	631	F	F	intermediate in perfumery
5	PROPANE,1-ISOCYANATO-2-METHYL-	5	RIC	1187	2.001	710	G	G	
6	MORPHOLINE,3,5-DIMETHYL-4-NITROSO-	6	RIC	1257	7.995	733	G	G	mod-toxic(20 ppm);rubber accelerator;solv
7	PHENOL,2,6-BIS(1,1-DIMETHYLETHYL)-4-METHYL-,METHYLCARBAMATE	7	RIC	1451	3.487	658	G	F	
8	FURAN,2-BUTYLTETRAHYDRO-	8	RIC	1604	55.870	832	G	G	
9	ETHENE,METHOXY-	9	RIC	1868	2.417	376	G	P	
10	ETHENOL,1-[BIS(1,1-DIMETHYLETHYL)PHOSPHINO]-,ACETATE	10	RIC	2111	2.537	347	G	P	
11	1,2-BENZENEDICARBOXYLICACID,DIBUTYLESTER	11	RIC	2178	20.772	930	G	G	phthalate;plasticizer
12	PENTANAMIDE,4-METHYL-	12	RIC	2716	6.329	656	G	F	
13	PROPANE,1-(1,1-DIMETHYLETHOXY)-2,2-DIMETHYL-	13	RIC	2767	1.933	709	F	F	
14	2-PENTENE,5-BROMO-2,3-DIMETHYL-	14	RIC	2875	3.791	768	F	F	not brominated,2nd choice better
15	1,2-BENZENEDICARBOXYLICACID,DIISOOCTYLESTER	15	RIC	2940	100.000	821	G	G	phthalate,plasticizer
16	6H-DIBENZO[B,D]PYRAN-1-OL,3-HEXYL-6A,7,8,10A-TETRAHYDRO-6,6,9-TRIMET	16	RIC	3147	3.671	607	G	F	phthalate likely
17	4-NONENE,5-NITRO-	17	RIC	3247	3.535	515	G	P	
18	6H-DIBENZO[B,D]PYRAN-1-OL,3-HEXYL-6A,7,8,10A-TETRAHYDRO-6,6,9-TRIMET	18	RIC	3359	3.107	533	G	P	phthalate likely

METHANOL REPORT - FILE 0656

A 0656 LF
02/01 14:22:00
MPLE 15:RR16 DOWNSTREAM 1:150UL ACID EXT OF 150OML
METHOD BY: ANALYST: SH

OUNT=AREA(HGHT) * REF.AMT/(REF.AREA(HGHT)* RESP.FACT)
P. FAC FROM LIBRARY ENTRY

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	226	1.163	885	G	G	dichloromethane(from injection solvent)
2	RIC	273	3.622	956	G	G	
3	RIC	441	0.250	618	G	F	
4	RIC	757	0.453	461	G	P	
5	RIC	880	0.675	704	G	F	
6	RIC	993	0.430	847	G	G	
7	RIC	1033	1.196	872	G	G	
8	RIC	1059	0.480	799	P	F	
9	RIC	1068	1.272	743	P	F	
10	RIC	1129	1.070	735	G	F	
11	RIC	1159	1.192	793	G	G	C5-phenol(wood product)
12	RIC	1173	1.527	901	G	G	2-methyl-propanoic acid butyl ester
13	RIC	1193	1.335	930	G	G	iso octanol
14	RIC	1244	2.113	715	F	G	
15	RIC	1254	2.745	797	F	G	
16	RIC	1299	0.493	877	G	G	3-hydroxy-3-methyl-2-butanone
17	RIC	1367	8.035	740	G	F	
18	RIC	1403	1.064	533	P	P	
19	RIC	1403	0.972	548	P	P	
20	RIC	1408	0.629				computer error
21	RIC	1487	2.963	535	G	P	
22	RIC	1590	21.256	727	G	G	2-butyl THF (solvent)
23	RIC	1720	3.248	671	G	F	
24	RIC	1763	2.348	794	F	G	hydrocarbon
25	RIC	1772	0.787	845	F	F	hydrocarbon
26	RIC	1880	1.330	602	F	P	
27	RIC	1894	1.515	519	P	P	
28	RIC	1921	0.701	802	F	G	hydrocarbon
29	RIC	1933	1.142	797	F	G	hydrocarbon
30	RIC	1967	0.772	513	P	P	hydrocarbon
31	RIC	1975	0.782	668	P	F	α,α - dimethyl cycloheptane methanol
32	RIC	2022	2.196	854	G	G	dibutyl phthalate
33	RIC	2046	1.217	489	P	P	unknown
34	RIC	2046	1.219	521	P	P	unknown
35	RIC	2098	2.015	374	F	F	substituted phenol
36	RIC	2172	55.473	918	G	G	dibutyl phthalate
37	RIC	2201	7.812	742	G	G	
38	RIC	2272	1.767	518	G	P	
39	RIC	2286	0.773	574	F	P	
40	RIC	2328	1.003	639	F	F	methyl decene
41	RIC	2361	1.577	739	G	F	long chain alcohol
42	RIC	2453	8.215	607	G	F	
43	RIC	2486	18.561	840	G	G	
44	RIC	2545	0.782	805	G	F	
45	RIC	2877	2.574	550	G	F	hexanamide

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
47	DODECANAMIDE	47	RIC	2728	100.000	608	G	G	dodecanamide
48	DODECANAMIDE	48	RIC	2757	35.350	803	G	G	
49	FORMAMIDE, N-METHYL-	49	RIC	2799	1.174	732	G	F	
50	11-HENEICOSANONE	50	RIC	2829	1.137	208	G	P	unknown
51	1-HEPTADECANOL	51	RIC	2863	17.793	791	G	F	
52	1,2-BENZENEDICARBOXYLICACID, DIISOOCTYLESTER	52	RIC	2924	10.045	819	G	F	di-octyl phthalate
53	4-HEXENOICACID, 3-METHYL-2,6-DIOXO-	53	RIC	2937	1.055	701	F	F	
54	NONANE, 3,7-DIMETHYL-	54	RIC	2986	1.348	743	G	F	hydrocarbon
55	2-HEXANOL, 2,5-DIMETHYL-, (S)-	55	RIC	3034	0.482	725	F	F	
56	HYDROXYLAMINE, O-DECYL-	56	RIC	3078	1.621	770	G	G	hydrocarbon
57	9-OCTADECENAMIDE, (Z)-	57	RIC	3182	0.770	763	G	F	
58	UNDECANE, 2,4-DIMETHYL-	58	RIC	3206	0.401	846	F	F	hydrocarbon
59	3,7,11-TRIDECATRIENENITRILE, 4,8,12-TRIMETHYL-	59	RIC	3230	1.488	694	G	G	
60	1-HEPTANOL, 2-PROPYL-	60	RIC	3311	1.295	788	G	F	
61	CYCLOHEXANOL, 3,5-DIMETHYL-	61	RIC	3484	0.516	676	G	F	
62	17-PENTATRIACONTENE	62	RIC	3515	3.094	868	G	G	
63	NITRICACID, NONYLESTER	63	RIC	3718	0.717	791	G	F	

QUANTITATION REPORT FILE: 0737

DATA: 0737.TI
01/05/82 11:08:00
SAMPLE: DOWNSTREAM WATER SAMPLE #6 SPARGE
SUBMITTED BY: AC ANALYST: PB

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	ACETICACID, METHYLESTER
2	1-PROPANOL, 2-ETHOXY-
3	METHANE, DICHLORO-
4	ETHANOL
5	PROPANE, 2, 2-DIMETHYL-
6	2-FURANMETHANOL, TETRAHYDRO-, ACETATE
7	1, 3, 5-CYCLOHEPTATRIENE
8	BUTANENITRILE
9	DEUTERO CHLORBENZENE
10	PROPANE, 1-(ETHENYLOXY)-2-METHYL-

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	321	0.976	947	G	G	few ions
2	RIC	401	100.000	361	G	P	mixture of 2 components or system peak-ignore
3	RIC	452	1.297	873	G	G	lab air may contribute here
4	RIC	464	1.607	976	G	G	scotch & water this time
5	RIC	584	0.857	850	P	F	overlap with next peak
6	RIC	591	4.745	850	P	F	overlap with previous peak
7	RIC	642	3.495	905	F	F	toluene
8	RIC	734	0.821	856	G	G	
9	RIC	895	3.740	995	G	G	internal std @ 20 ppb
10	RIC	1111	0.512	746	G	P	

ITATION REPORT FILE: 0859

: 0859.TI
5/82 14:05:00
LE: #3 DOWNSTREAM ON SOIL EXT 0.5/10000UL (67.8 GRAMS)
S.: 30-280@6'C/MIN HOLD 20 30M DB-5
ULA: . INSTRUMENT: QT WEIGHT: 0.000
ITTED BY: A.KOVEN ANALYST: SH ACCT. NO.: UOSLS8

21

NT=AREA * REF.AMNT/(REF.AREA* RESP.FACT)

NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
2-PENTANONE,4-HYDROXY-4-METHYL-	1	RIC	311	100.000	973	G	G	acetone condensation produce during extraction
AZULENE	2	RIC	990	4.526	972	G	G	napthalene also likely
BUTANE,2,2-DIMETHYL-	3	RIC	1025	0.169	899	G	G	hydrocarbon
NAPHTHALENE,2-METHYL-	4	RIC	1173	1.357	918	G	G	beta isomer used for insecticide,substituted PAH
BUTANE,2,2-DIMETHYL-	5	RIC	1186	0.187	886	G	G	hydrocarbon
NAPHTHALENE,2-METHYL-	6	RIC	1200	1.127	905	G	G	substitued PAH
1,1'-BIPHENYL	7	RIC	1304	0.242	740	G	F	heat transfer agent?
DECANE,2,4-DIMETHYL-	8	RIC	1335	0.320	905	G	G	hydrocarbon
NAPHTHALENE,1,4-DIMETHYL-	9	RIC	1341	0.481	865	G	G	substituted PAH
NAPHTHALENE,2,3-DIMETHYL-	10	RIC	1362	0.786	961	G	G	substituted PAH
NAPHTHALENE,2,3-DIMETHYL-	11	RIC	1367	0.421				
NAPHTHALENE,1,4-DIMETHYL-	12	RIC	1362	0.786	863	F	G	substituted PAH
NAPHTHALENE,1,4-DIMETHYL-	13	RIC	1367	0.421				
APHTHALENE,1-ETHYL-	14	RIC	1390	0.305	709	F	F	substitued PAH
ACENAPHTHYLENE	15	RIC	1403	0.608	899	G	G	
ISOOCTANE,(ETHENYLOXY)-	16	RIC	1423	0.243	792	G	F	
PENTANE,3-ETHYL-2,3-DIMETHYL-	17	RIC	1438	0.097	403	G	P	
ACENAPHTHYLENE,1,2-DIHYDRO-	18	RIC	1454	4.171	961	G	G	dye intermediate;manufc plastics;insecticide;fungicide
HEXANE,3,3-DIMETHYL-	19	RIC	1474	0.579	899	G	G	hydrocarbon
DIBENZOFURAN	20	RIC	1496	3.797	914	G	G	probably toxic;insecticide
9H-FLUORENE	21	RIC	1585	7.551	925	G	G	tricylic hydrocarbon;insecticides;dyestuffs;resins
ETHER,HEXYLPENTYL	22	RIC	1606	1.914	833	P	F	
PHENOL,4-(1,1,3,3-TETRAMETHYLBUTYL)-	23	RIC	1613	2.224	874	F	G	tyloxapol:detergent
DIBENZOFURAN,4-METHYL-	24	RIC	1635	0.817	873	F	G	9H-xanthene also good match
DIBENZOFURAN,4-METHYL-	25	RIC	1651	1.280	925	F	G	
HEXANE,3,3-DIMETHYL-	26	RIC	1730	1.300	908	F	G	hydrocarbon
UNDECANE	27	RIC	1737	0.672	842	F	G	hydrocarbon
9H-FLUORENE,1-METHYL-	28	RIC	1753	0.224	768	F	F	see item #21
PHENOL,4-(2-PHENYLETHENYL)-,(E)-	29	RIC	1781	0.397	651	P	F	a phenol likely
DIBENZOTHIOPHENE	30	RIC	1796	2.108	845	G	G	PAH with sulfur likely
ANTHRACENE	31	[illegible]	[illegible]32	52.123	952			phenanthrene also good match
ANTHRACENE	32		.841	14.147	952			possibly carcinogenic; dyes
TRIDECANE	33	RIC	1859	0.477	666	F	F	hydrocarbon
9H-CARBAZOLE	34	RIC	1893	2.807	903	G	G	dyes;explosives;insecticides;rubber anti-oxidant;detergents
1,4-ETHENOANTHRACENE,1,4-DIHYDRO-	35	RIC	1920	0.295	725	G	F	substituted PAH
PHENANTHRENE,2-METHYL-	36	RIC	1960	2.761	813	P	F	substituted PAH
PHENANTHRENE,3-METHYL-	37	RIC	1966	3.046	920	F	G	substituted PAH
PHENANTHRENE,2-METHYL-	38	RIC	1976	1.121	920	F	G	substituted PAH
4H-CYCLOPENTA[DEF]PHENANTHRENE	39	RIC	1985	6.305	842	F	G	substituted PAH
PHENANTHRENE,2-METHYL-	40	RIC	1993	1.355	922	F	G	substituted PAH
1,2-BENZENEDICARBOXYLICACID,DIBUTYLESTER	41	RIC	2031	1.901	888	F	G	phthalate-plasticizer
NAPHTHALENE,1-PHENYL-	42	RIC	2043	1.731	738	F	F	substituted PAH
HYDROXYLAMINE,O-DECYL-	43	RIC	2067	0.640	885	G	G	hydrocarbon
SULFURDIOXIDE	44	RIC	2117	7.054	485	G	P	sulfur compound likely
FLUORANTHENE	45	RIC	2142	42.811	936	G	G	PAH, Pyrene good match also
HYDROXYLAMINE,O-DECYL-	46	RIC	2170	0.696	705	F	F	hydrocarbon
Hydroxylamine,O-Decyl-	47	RIC	2175					computer error

	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
0	1H-PYRROLO[2,3-B]PYRIDINE,4-METHYL-2-PHENYL-	48	RIC	2170	0.696	623	F	P	PAH likely
8	1H-PYRROLO[2,3-B]PYRIDINE,4-METHYL-2-PHENYL-	49	RIC	2175	0.422				
9	PYRENE	50	RIC	2195	29.538	950	G	G	PAH,fluoranthene good match also
0	PYRENE	51	RIC	2200	6.283				
1	1,4-NAPHTHOQUINONE,6-ETHYL-2,5-DIHYDROXY-	52	RIC	2195	29.530	511	P	P	quinone/quinolines highly toxic;medicines,dyes,etc.
2	1,4-NAPHTHOQUINONE,6-ETHYL-2,5-DIHYDROXY-	53	RIC	2200	6.283				
3	NAPHTHALENE,1-PHENYL-	54	RIC	2208	1.010	805	F	G	substituted PAH
4	2-FUROICACID,5-BROMO-3-METHYL-,METHYLESTER	55	RIC	2233	1.821	559	F	P	substituted quinone suggested
5	11H-BENZO[A]FLUORENE	56	RIC	2263	1.140	806			PAH
6	11H-BENZO[A]FLUORENE	57	RIC	2268	0.966				
7	UNDECANE	58	RIC	2263	1.115	829	P	F	hydrocarbon
8	UNDECANE	59	RIC	2268	0.963				
9	PYRENE,1-METHYL-	60	RIC	2290	4.167	906	G	G	substituted PAH
0	PYRENE,1-METHYL-	61	RIC	2307	3.077	899	F	G	substituted PAH
1	PYRENE,2-METHYL-	62	RIC	2314	1.018	865	F	G	substituted PAH
2	PYRENE,2-METHYL-	63	RIC	2337	0.424	722	F	F	substituted PAH
3	HYDROXYLAMINE,O-DECYL-	64	RIC	2363	1.146	836	G	G	hydrocarbon
4	HYDROXYLAMINE,O-DECYL-	65	RIC	2454	1.876	835	P	G	hydrocarbon
5	HYDROXYLAMINE,O-DECYL-	66	RIC	2459	2.004				
6	BENZO[C]PHENANTHRENE	67	RIC	2454	1.391	824	F	G	PAH
7	BENZO[C]PHENANTHRENE	68	RIC	2459	1.955				
8	BENZ[A]ANTHRACENE	69	RIC	2512	8.953	951	G	G	PAH
9	BENZ[A]ANTHRACENE	70	RIC	2522	8.498	895	F	G	PAH
0	TRIPHENYLENE	71	RIC	2540	3.238	648	P	P	hydrocarbon and PAH co-eluting
1	NONANE,2,3-DIMETHYL-	72	RIC	2586	5.529	358	P	P	
2	HYDROXYLAMINE,O-DECYL-	73	RIC	2625	2.348	867	F	G	hydrocarbon
3	HYDROXYLAMINE,O-DECYL-	74	RIC	2707	1.104	800	G	F	hydrocarbon
4	PERYLENE	75	RIC	2785	1.814	899	P	G	PAH
5	PERYLENE	76	RIC	2790	3.498	930	P	G	PAH
6	PERYLENE	77	RIC	2785	1.814	829	G	G	PAH
7	PERYLENE	78	RIC	2790	3.498	903	G	G	PAH
8	PERYLENE	79	RIC	2860	1.058				
9	PERYLENE	80	RIC	2874	1.710				
	OCTADECANE,-1-CHLORO					461	F	P	hydrocarbon likely
	DECANE,2,3,8-TRIMETHYL-					699	G	P	hydrocarbon

QUANTITATION REPORT· FILE: 0846

23.

DATA: 0846.TI
02/11/82 12:36:00
SAMPLE: #3 DOWNSTREAM SOIL ACID EXT 1/2000UL
CONDS.: 30-280@6'C/MIN HOLD 25 30M DB-5
FORMULA: . INSTRUMENT: GT WEIGHT: 0.000
SUBMITTED BY: A. KOVEN ANALYST: SH ACCT. NO.: VOSLSS'

AMOUNT=AREA * REF.AMNT/(REF.AREA* RESP.FACT)

NO	NAME
1	METHANE, DICHLORO-
2	3-PENTEN-2-ONE, 4-METHYL-
3	ACETICACID, 1-METHYLETHYLESTER
4	2-PENTANONE, 4-HYDROXY-4-METHYL-
5	4-PENTEN-2-ONE, 4-METHYL-
6	2-PENTANONE
7	2(3H)-BENZOTHIAZOLONE

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	204	100.000	831			extraction solvent
2	RIC	333	0.190	932	G	G	
3	RIC	378	0.851	752	G	P	
4	RIC	429	81.766	944	G	G	prodcut of extraction method?
5	RIC	540	0.497	796	G	F	
6	RIC	666	0.195	775	G	F	
7	RIC	1683	0.030	778	G	G	seen many times

DATA: 0661.TI
12/04/81 11:37:00
SAMPLE: WATER #7(BH) 1/500UL BN EXT
CONDS.: 12M SE-54 30-280@8°C/MIN HOLD 15
FORMULA: INSTRUMENT: GT WEIGHT: 0.000
SUBMITTED BY: ANALYST: SH ACCT. NO.: A. KOVEN

24.

AMOUNT=AREA * REF.AMNT/(REF.AREA* RESP.FACT)

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	1,2,3-PROPANETRIOL	1	RIC	241	4.977	700	G	F	poor match-low amt of compd
2	1-PENTENE,4-METHYL-	2	RIC	267	4.112	786	F	P	hydrocarbon or alcohol likely
3	2-PROPANOL,1-(2-METHOXY-1-METHYLETHOXY)-	3	RIC	423	11.739	909	F	G	alcohol
4	2-PROPANOL,1-(2-METHOXY-1-METHYLETHOXY)-	4	RIC	433	3.835	555	P	P	alochol-overloaps with previous peak
5	1,3-DIOXOLANE,2-ETHYL-	5	RIC	456	3.423	663	P	P	
6	1,3-BENZODIOXOL-2-ONE,HEXAHYDRO-,TRANS-	6	RIC	476	41.809	750			
7	BENZENEMETHANOL,.ALPHA.,.ALPHA.-DIMETHYL-	7	RIC	608	100.000	902	G	G	
8	PHENOL,3,5-DIMETHYL-	8	RIC	651	7.176	850	G	G	xylenol-5 isomers;hi-toxic;used in disinfectants etc.
9	D8-NAPTHALENE	9	RIC	767	16.687	967	G	G	D8-NAPTHALENE internal std, 0.70 ppb
10	2-PROPANONE,1,1-DICHLORO-	10	RIC	810	3.395	453	P	P	match poor but few ions available for comparison
11	3-CYCLOHEXENE-1-METHANOL,.ALPHA.,.ALPHA.,4-TRIMETHYL-,(S)-	11	RIC	816	2.986	757	P	F	
12	THIOPHENE,TETRAHYDRO-,1,1-DIOXIDE	12	RIC	880	9.159	671	P	F	
13	PHENOL,3-(1-METHYLETHYL)-	13	RIC	893	6.243	880	F		C_3 Phenol toxic,action similar to Phenol
14	1H-INDOLE-	14	RIC	1050	13.712	581	P		
15	1H-INDOLE	15	RIC	1058	8.155	622	P		
16	2-PENTANOL,2-METHYL-	16	RIC	1058	8.155				Computer error
17	3-HEXANOL,3,5-DIMETHYL-	17	RIC	1094	11.130	662	P	F	
18	1,3-DIOXOLANE,2-(1-METHYLETHYL)-	18	RIC	1101	7.764	623	P	F	mixture of cmpds likely
19	2-OXAZOLIDINONE,3-(2-HYDROXYPROPYL)-5-METHYL-	19	RIC	1352	65.195	576	G	P	
20	2-OXAZOLIDINONE,3-(2-HYDROXYPROPYL)-5-METHYL-	20	RIC	1420	35.214	856	G	G	oxazole base-may be used in waxes
21	PHENOL,4-(2,2,3,3-TETRAMETHYLBUTYL)-	21	RIC	1630	43.459	901	P	G	2-isomers,tyloxapol,used as a detergent
22	23535BC BLOOD-	22	RIC	1719	6.277	668	P	F	biological ?
23	2-BUTANONE,1-(4-TERT-BUTYL-2,6-XYLYL)-3-PHENYL-	23	RIC	1776	15.698	523	P	F	purity low but major ion present
24	THIENO[3,2-C]PYRIDIN-4(5H)-ONE	24	RIC	1785	4.795	696	P	F	
25	1-AZABICYCLO[2.2.2]OCTANE-2-CARBOXYLICACID,3-OXO-,ETHYLESTER	25	RIC	1824	4.363	377	P	F	
26	[1,1'-BICYCLOHEXYL]-4-ONE	26	RIC	1920	3.846	300	P	P	
27	2-DECENAL,(E)-	27	RIC	1934	10.114	388	P	P	
28	SULFUR,MOL.(S8)	28	RIC	2200	20.822	645	P	F	sulfur or sulfur cmpd
29	BUTANOICACID,2-AMINO-4-(METHYLSELENO)-	29	RIC	2247	3.867	419	G	P	
30	DISULFIDE,BIS(1-METHYLETHYL)	30	RIC	2269	7.803	518	G	F	
31	KETONE,METHYL2-METHYL-1,3-OXOTHIOLAN-2-YL	31	RIC	2289	2.425	333	G	F	
32	KETONE,METHYL2-METHYL-1,3-OXOTHIOLAN-2-YL	32	RIC	2392	3.106	650	G	F	
33	2-PROPANOL,1-(2-METHOXY-1-METHYLETHOXY)-	33	RIC	2431	3.397	712	G	F	
34	METHANE,TERT-BUTOXYMETHOXY-	34	RIC	2456	3.154	614	G	F	
35	1,3-DIOXOLANE,2-METHYL-2-PENTYL-	35	RIC	2486	39.451	607	G	F	
36	OCTANE,2,4,6-TRIMETHYL-	36	RIC	2635	3.007	870	G	G	hydrocarbon
37	9-OCTADECENAMIDE,(Z)-	37	RIC	2714	6.346	677	G	F	reasonable match to an amide-poss. from rapeseed
38	OCTANE,2,7-DIMETHYL-	38	RIC	2761	7.351	837	G	G	hydrocarbon
39	TETRACONTANE,3,5,24-TRIMETHYL-	39	RIC	2881	5.581	826	G	G	hydrocarbon
40	OCTANE,2-BROMO-	40	RIC	2933	4.765	318	G	P	
41	OCTANE,2,4,6-TRIMETHYL-	41		2997	4.718	839	G	G	hydrocarbon
42	HEPTANOICACID,DOCOSYLESTER	42	RIC	3005	0.772	333	F	P	
43	NITRICACID,NONYLESTER	43	RIC	3061	1.714	593	G	F	
44	OCTACOSANE	44	RIC	3110	3.735	793	G	G	hydrocarbon
45	UNDECANE,2,4-DIMETHYL-	45	RIC	3219	2.327	814	G	G	hydrocarbon
46	4-NONENE,5-NITRO-	46	RIC	3242	1.051	583	G	F	
47	UNDECANE,2,4-DIMETHYL-	47	RIC	3324	1.829	827	G	G	hydrocarbon
48	HEXANE,3,3-DIMETHYL-	48	RIC	3425	0.852	776	G	F	hydrocarbon
49	BUTANE,2,2-DIMETHYL-	49	RIC	3526	0.592	776	G	F	hydrocarbon

)UANTITATION REPORT FILE: 0663

)ATA: 0663.TI
12/04/81 13:49:00
SAMPLE: WATER#7(BH) ACID EXT 1/2000UL
CONDS.: 12M SE-54 30-280@8'C/MIN HOLD 15
FORMULA: . INSTRUMENT: QT WEIGHT: 0.000
SUBMITTED BY: GARTNER ANALYST: SH ACCT. NO.: A. KOVEN

AMOUNT=AREA * REF.AMNT/(REF.AREA* RESP.FACT)

NO	NAME
1	BUTANOICACID,3,3-DIMETHYL-
2	2-PROPANOL,1-(2-METHOXY-1-METHYLETHOXY)-
3	OXETANE,2,4-DIMETHYL-,TRANS-
4	1-PENTANOL,4-METHYL-
5	BUTANOICACID,METHYLESTER
6	HEXANOICACID,3,5,5-TRIMETHYL-
7	1-HEXENE,5,5-DIMETHYL-
8	1-BUTANOL,3-METHYL-,ACETATE
9	MORPHOLINE,4,4'-METHYLENEBIS-
10	2-HEPTANAMINE,6-METHYL-
11	BENZOICACID,2,6-DIMETHYL-
12	2-OXAZOLIDINONE,3-(2-HYDROXYPROPYL)-5-METHYL-
13	ETHER,SEC-BUTYLISOPROPYL
14	1-HEXENE,3,4,5-TRIMETHYL-
15	1,2-BENZISOTHIAZOL-3(2H)-ONE
16	2-PYRROLIDINETHIONE,5,5-DIMETHYL-4-PHENYL-
17	1-PENTANOL,5-(PHENYLMETHOXY)-
18	BICYCLO[1.1.0]BUTANE-1-CARBOXYLICACID,2,2,4,4-TETRAMETHYL-,METHYLEST
19	BENZENE,(BUTOXYMETHYL)-
20	2H-1,3-BENZOXAZINE,6-TERT-BUTYL-3-CYCLOHEXYL-3,4-DIHYDRO-
21	HEXADECANOICACID
22	9-OCTADECENAMIDE,(Z)-
23	NONADECANOL
24	2-BUTENOICACID,2-PROPENYLESTER

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	217	19.540	862	P	G	
2	RIC	301	6.594	856	F	G	also in BN extract
3	RIC	361	7.902	750	G	F	
4	RIC	705	5.019	881	F	G	
5	RIC	733	7.795	773	F	F	
6	RIC	834	18.402	658	P	F	
7	RIC	845	7.012	616	P	P	
8	RIC	1183	35.295	564	P	P	
9	RIC	1224	39.731	421	P	P	
10	RIC	1286	100.000	699	F	F	
11	RIC	1292	33.078	360	P	P	
12	RIC	1366	16.732	527	G	P	
13	RIC	1531	10.612	502	P	P	
14	RIC	1598	15.089	604	F	F	
15	RIC	1761	28.309	658	G	F	all computer choices "fair
16	RIC	1795	5.062	506	G	F	
17	RIC	1879	11.120	511	G	F	
18	RIC	1917	18.380	457	G	F	
19	RIC	2025	5.555	468	P	F	few ions to match
20	RIC	2176	12.662	159	G	P	
21	RIC	2207	7.344	610	G	F	
22	RIC	2723	7.787	652	G	F	
23	RIC	2875	8.384	833	G	G	
24	R		2.364	596	G	F	

QUANTITATION REPORT FILE: 0740

26.

DATA: 0740.T1
01/05/82 14:32:00
SAMPLE: BLACK HOLE SPARGE
SUBMITTED BY: AC ANALYST: PB

AMOUNT=AREA(HGHT) * REF.ANNT/(REF.AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	BUTANE, 2-METHYL-
2	METHANE, THIOBIS-
3	2-PROPANONE
4	FURAN, TETRAHYDRO-
5	GUANIDINE
6	METHANE, DICHLORO-
7	2-BUTANONE, 3-METHOXY-3-METHYL-
8	1,3,5-CYCLOHEPTATRIENE
9	1,4-DIOXANE
10	BORANE, TRIMETHYL-
11	BENZENE, ETHYL-
12	BENZENE, ETHYL-
13	DEUTERO CHLORBENZENE
14	CYCLOPENTANE, 1,1-DIMETHYL-
15	ACETICACID

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	117	3.268	808	G	F	light hydrocarbon
2	RIC	209	3.537	885	G	G	methyl sulfide
3	RIC	276	12.790	917	G	G	acetone(1000 ppm),common solvent
4	RIC	348	100.000	991	G	G	hi-toxic(200 ppm),common solvent
5	RIC	366	14.475	812	G	F	$NHC(NH_2)_2$ lo-toxic,found naturally in mushrooms etc
6	RIC	413	54.673	933	G	G	common solvent-also used in laboratory!
7	RIC	564	5.989	802	G	F	
8	RIC	616	22.849	921	F	G	toluene, common solvent in paints etc.
9	RIC	662	5.066	881	G	G	hi-toxic(100 ppm) solvent for paints, etc.
10	RIC	720	5.668	846	G	G	few ions but reasonable match
11	RIC	775	4.871	693	G	F	mod-toxic(100 ppm) used in prod. of styrene
12	RIC	859	6.897	811	G	G	ethyl benzene mod-toxic(100 ppm)used in prod. of styrene
13	RIC	899	40.583	995	G	G	Internal std. @ 20 ppb
14	RIC	1150	4.738	763	P	F	
15	RIC	1156	5.528	842	P	F	poss. a breakdown product of an acetate

DATA: 0061.TI
02/15/82 16:38:00
SAMPLE: #5 BH SEDIMENT(7) BN SOIL EXT 0.5/10000UL 94.6 GRAMS
CONDS.: 30-280@6'C/MIN HOLD 20 30M DB-5
FORMULA: INSTRUMENT: GT WEIGHT: 0.000
SUBMITTED BY: A.KOVEN ANALYST: SH ACCT. NO.: VOSLSS

AMOUNT=AREA * REF.AMNT/(REF.AREA* RESP.FACT)

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	METHANE,DICHLORO-	1	RIC	305	11.139	546	P	P	solvent mixture-extraction residue
2	2-PENTANONE,4-HYDROXY-4-METHYL-	2	RIC	363	100.000	982	G	G	acetone condensation prod.-from extraction solvent
3	CYCLOHEXANE,AZIDO-	3	RIC	389	0.770	715	F	F	hexenal better choice
4	BENZENE,1,2-DIMETHYL-	4	RIC	414	1.692	903	G	G	xylene isomer-solvent
5	1,3,5,7-CYCLOOCTATETRAENE	5	RIC	457	0.328	847	G	G	xylene isomer-solvent
6	1,3,5,7-CYCLOOCTATETRAENE	6	RIC	461	0.502	612	F	P	xylene isomer-solvent
7	1,3-CYCLOPENTADIENE,5-(1-METHYLETHYLIDENE)-	7	RIC	457	0.328				computer error-repeat of peak #5
8	1,3-CYCLOPENTADIENE,5-(1-METHYLETHYLIDENE)-	8	RIC	461	0.502				computer error-repeat of peak #6
9	AZULENE	9	RIC	1006	14.148	967	G	G	2nd choice-Naphthalene-moth repellant
10	1H-INDOLE	10	RIC	1183	3.109	646	F	P	poor match
11	1,1'-BIPHENYL	11	RIC	1311	0.305	752	F	F	heat transfer agent;fungistat for oranges
12	BUTANE,2,2-DIMETHYL-	12	RIC	1341	0.230	791	F	F	retention time not consist. with choice-hydrocarbon
13	ACENAPHTHYLENE	13	RIC	1410	2.964	938	G	G	two possible choices;acenphthene-insecticide
14	DECANE,6-ETHYL-2-METHYL-	14	RIC	1479	0.455	768	F	F	hydrocarbon
15	1H-PHENALENE	15	RIC	1590	2.502	900	G	G	2nd choice-Fluorene-PAH-found in coal tar
16	HEPTANE,2,5,5-TRIMETHYL-	16	RIC	1610	0.623	785	G	G	hydrocarbon
17	PHENOL,4-(1,1,3,3-TETRAMETHYLBUTYL)-	17	RIC	1618	11.073	943	G	G	found in detergents
18	UNDECANE	18	RIC	1734	1.692	844	G	G	hydrocarbon
19	BENZO[C]CINNOLINE	19	RIC	1782	0.649	875	G	G	possible PAH metabolite
20	DIBENZOTHIOPHENE	20	RIC	1800	1.200	839	G	G	PNA-largest peak-possible combustion by-product
21	ANTHRACENE	21	RIC	1834	52.849	959	G	G	PAH-from coal tar or combustion by-product
22	ANTHRACENE	22	RIC	1844	13.117	970	G	G	probably phenanthrene-PAH-coal tar or combustion by-product
23	9H-CARBAZOLE	23	RIC	1897	4.233	822	G	G	PNA from coal tar or combustion by-product
24	PHENANTHRENE,9-METHYL-	24	RIC	1964	1.069	730	G	G	PAH(substituted) from coal tar or combustion by-product
25	PHENANTHRENE,9-METHYL-	25	RIC	1970	0.842	856	G	G	PAH(substituted) from coal tar or combustion by-product
26	4H-CYCLOPENTA[DEF]PHENANTHRENE	26	RIC	1989	4.726	838	G	G	PAH
27	NAPHTHALENE,1-PHENYL-	27	RIC	2047	1.282	660	G	P	poor match-substituted PAH?
28	SULFURDIOXIDE	28	RIC	2116	0.625	608	G	P	poor match-small peak
29	FLUORANTHENE	29	RIC	2144	47.259	950	G	G	very large PAH from coal tar or combustion
30	PYRENE	30	RIC	2167	3.718	938	G	G	PAH from coal tar or combustion
31	PYRENE	31	RIC	2198	30.978	938	G	G	isomer PAH from coal tar or combustion
32	1H-PHENANTHRO[9,10-D]IMIDAZOLE	32	RIC	2204	1.986	968	G	G	isomer PAH from coal tar or combustion
33	PYRENE,1-METHYL-	33	RIC	2293	1.315	651	F	P	poor match
34	11H-BENZO[A]FLUORENE	34	RIC	2310	1.160	825	G	G	PAH
35	UNDECANE,2,4-DIMETHYL-	35	RIC	2462	1.909	774	G	G	hydrocarbon (computer error)
36	BENZO[GHI]FLUORANTHENE	36	RIC	2462	1.909	813	G	G	PAH
37	BENZO[GHI]FLUORANTHENE	37	RIC	2509	1.434	760	G	G	PAH
38	BENZ[A]ANTHRACENE	38	RIC	2515	7.695	973	G	G	PAH large peak
39	BENZ[A]ANTHRACENE	39	RIC	2524	9.153	919	G	G	PAH many isomers
40	PERYLENE	40	RIC	2788	3.647	909	G	G	PAH many isomers
41	PERYLENE	41	RIC	2793	4.616	834	G	G	PAH many isomers
42	PERYLENE	42	RIC	2788	3.647				duplicate of #40 (computer error)
43	PERYLENE	43	RIC	2793	4.616				duplicate of #41 (computer error)
44	PERYLENE	44	RIC	2862	2.226	874	G	G	PAH-from coal tar or combustion
45	BENZO[K]FLUORANTHENE	45	RIC	2877	2.783	885	G	G	PAH-from coal tar or combustion
46	CYCLOHEXANE,(2-DECYLDODECYL)-	46	RIC	2903	0.947	263	F	P	poor match

QUANTITATION REPORT FILE: 0848

28

DATA: 0848.TI
02/11/82 15:11:00
SAMPLE: #5 BH SEDIMENT ACID EXT 1/2000UL
CONDS.: 30-280@6'C/MIN HOLD 25 30M DB-5
FORMULA: INSTRUMENT: QT WEIGHT: 0.000
SUBMITTED BY: A. KOVEN ANALYST: SH ACCT. NO.: UOSLSS

AMOUNT=AREA * REF.AMNT/(REF.AREA* RESP.FACT)

NO	NAME
1	METHANE,DICHLORO-
2	PHENANTHRENE
3	4-NONENE,5-NITRO-
4	DECANOICACID
5	PYRENE
6	PYRENE
7	PHENOL,4,4'-(1-METHYLETHYLIDENE)BIS-

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	204	100.000	866	G	G	Extraction solvent
2	RIC	1825	0.042	896	G	G	3-ring PAH
3	RIC	2004	0.067	711	F	F	
4	RIC	2026	0.237	551	G	P	
5	RIC	2133	0.106	912	G	G	4-ring PAH
6	RIC	2187	0.070	903	G	G	
7	RIC	2242	0.095	742	G	G	

QUANTITATION REPORT FILE 0662

NIA. 0662 11
2/04/91 12:33:00
SAMPLE WATERIB 5 N DILCH 8/31 NEUTRAL EXT 1/5000M
SUBMITTED BY. ANALYST. SH

AMOUNT=(AREA(HGHT) * REF AMT/(REF AREA(HGHT)* RESP.FACT)
RESP FAC FROM LIBRARY ENTRY

NO	NAME	NO	M/C	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	CYCLOPENTANE,2-PROPENYL-	1	RIC	481	38.210	748	G	F	hydrocarbon
2	BENZENEMETHANOL,.ALPHA.,.ALPHA.-DIMETHYL-	2	RIC	597	23.870	660	P	P	unknown
3	BENZENEMETHANOL,.ALPHA.,.ALPHA.-DIMETHYL-	3	RIC	610	100.000	903	F	G	dimethyl benzyl alcohol
4	3-PENTEN-2-OL	4	RIC	717	4.238	590	P	P	unknown
5	PHOSPHORICACID,TRIETHYLESTER	5	RIC	736	31.607	862	F	G	triethylphosphate-plasticizers-toxic
6	D8-NAPTHALENE	6	RIC	774	11.123	929	F	G	internal standard
7	2-PENTEN-1-OL,2-METHYL-,(Z)-	7	RIC	788	5.960	699	P	P	poor match-mixture
8	L-PROLINE,1-ACETYL-4-HYDROXY-,TRANS-	8	RIC	854	7.819	458	P	P	unknown
9	2,3-DIOXABICYCLO[2.2.2]OCT-5-ENE,1-METHYL-4-(1-METHYLETHYL)-	9	RIC	863	17.932	346	P	P	unknown
10	ISOQUINOLINE	10	RIC	902	30.171	874	G	G	toxic
11	CYCLOHEXENE,3,3,5-TRIMETHYL-	11	RIC	934	7.732	711	G	F	unsaturated hydrocarbon
12	2-PROPANOL,1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-	12	RIC	1056	46.670	756	P	F	
13	2-FURANACETAMIDE,N-METHYL-	13	RIC	1064	27.344	398	P	P	poor resolution of peak-unknown
14	2-BUTANOL,2-METHYL-	14	RIC	1072	63.536	297	P	P	unknown
15	2-PROPANOL,1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-	15	RIC	1079	19.194	606	P	P	unknown
16	MORPHOLINE,3,5-DIMETHYL-4-NITROSO-	16	RIC	1300	51.296	676	F	P	unknown
17	2-PROPENAL,3-(2,2,6-TRIMETHYL-7-OXABICYCLO[4.1.0]HEPT-1-YL)-	17	RIC	1319	94.535	641	F	P	unknown
18	2-HEXANONE,5-METHYL-5-PHENYL-	18	RIC	1577	14.850	681	F	F	
19	23535BC BLOOD	19	RIC	1714	5.818	722	F	F	unknown-aromatic?
20	23535BC BLOOD	20	RIC	1716	3.824				computer error
21	CYCLOOCTANEMETHANOL,.ALPHA.,.ALPHA.-DIMETHYL-	21	RIC	1755	13.181	402	P	G	hydrocarbon,second choice
22	1,3-BENZENEDICARBOXALDEHYDE,2,4-DIHYDROXY-6-METHYL-	22	RIC	1776	58.694	524	P	G	unknown
23	BENZENESULFONAMIDE,N-BUTYL-	23	RIC	1926	20.655	509	P	F	poor match-probably aromatic
24	1H,3H-NAPHTHO[1,8-CD]PYRAN-1-ONE	24	RIC	2081	4.681	718	F	G	aromatic lactone?
25	ETHANOL,2-PHENOXY-,BENZOATE	25	RIC	2178	6.463	454	P	F	second choice-phthalate
26	SPIRO[5.5]UNDEC-1-ENE	26	RIC	2270	23.538	512	P	G	unsaturated hydrocarbon
27	KETONE,METHYL2-METHYL-1,3-OXOTHIOLAN-2-YL	27	RIC	2395	6.016	753	F	P	propylene glycol derivative-solvent?
28	2-PROPANOL,1-(2-METHOXY-1-METHYLETHOXY)-	28	RIC	2433	7.440	678	P	G	unknown
29	2-PROPANOL,1-(1-METHYLPROPOXY)-	29	RIC	2459	43.007	654	P	G	solvent?
30	1,3-DIOXOLANE,2-METHYL-2-PENTYL-	30	RIC	2482	12.144	631	P	G	second choice 2-amino-6-mercapto 4-(1H)-pyrimidinon
31	BENZENESULFONAMIDE,4-(DIMETHYLAMINO)-N,N-DIMETHYL-	31	RIC	2501	19.684	266	P	G	unknown
32	TETRADECANOICACID,3-HYDROXY-,METHYLESTER	32	RIC	2553	18.668	663	P	G	fatty acid ester
33	KETONE,METHYL2-METHYL-1,3-OXOTHIOLAN-2-YL	33	RIC	2588	7.514	732	F	P	contain sulfur?
34	SILANE,(CHLOROMETHYL)DIMETHYL-	34	RIC	2599	4.216	400	P	P	unknown
35	KETONE,METHYL2-METHYL-1,3-OXOTHIOLAN-2-YL	35	RIC	2603	22.662	739	P	G	contains sulfur?
36	BUTANE,1-(ETHENYLOXY)-	36	RIC	2800	12.270	506	P	G	contaminated hydrocarbon
37	1-HEXENE,3,5,5-TRIMETHYL-	37	RIC	2932	5.091	308	P	G	possible phthalate
38	2-HEPTANONE,6-(2-FURANYL)-6-METHYL-	38	RIC	3114	7.307	612	P	G	unknown
39	1,5-HEPTADIENE,2,3,6-TRIMETHYL-	39	RIC	3239	2.559	643	P	G	unsaturated hydrocarbon
40	BENZENAMINE,N-[(4-NITROPHENYL)METHYLENE]-	40	RIC	3533	3.005	332	P	G	unknown
41	4-NONENE,5-NITRO-	41	RIC	3630	1.045	02	P	G	

QUANTITATION REPORT FILE 0664

DATA: 6-30-11
07/04/91 14:16:00
SAMPLE WATERIB S W DITCH (CHYDOUL ACID EXT.
QUANTITATED BY ANALYST: SH

AMOUNT=AREA(HGHT) * REF.AMOUNT/(REF.AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	2-CYCLOHEXEN-1-ONE
2	BUTANOICACID,3,3-DIMETHYL-
3	BUTANOICACID,METHYLESTER
4	HEXANOICACID,3,5,5-TRIMETHYL-
5	PENTANE,2,2,4-TRIMETHYL-4-NITRO-
6	2-THIAZOLANINE,4,5-DIHYDRO-
7	BENZOICACID,2,3-DIMETHYL-
8	CYCLOHEPTENE,1-(1,1-DIMETHYLETHOXY)-
9	HYDRAZINIUM,2-CYANO-1,1,1-TRIMETHYL-,HYDROXIDE,INNERSALT
10	BENZOICACID,3,4-DIMETHYL-
11	ACETAMIDE,N,N'-CARBONYLBIS-
12	1-HEXENE,3,4,5-TRIMETHYL-
13	2(3H)-BENZOTHIAZOLONE

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	245	15.339	889	P	G	found in other samples
2	RIC	257	17.687	811	P	F	fatty acid
3	RIC	770	44.444	769	P	F	fatty acid
4	RIC	845	100.000	774	P	F	fatty acid
5	RIC	856	18.857	646	P	P	fatty acid likely (2nd choice)
6	RIC	1209	98.715	414	P	P	
7	RIC	1255	58.883	712	P	F	fatty acid
8	RIC	1278	59.012	386	P	P	
9	RIC	1286	17.693	608	P	P	
10	RIC	1293	30.607	830	P	P	fatty acid
11	RIC	1494	99.875	603	G	P	
12	RIC	1594	25.397	611	G	P	
13	RIC	1733	25.263	709	G	F	seen in many samples

DATA: 0742.11
01/06/82 9:30:00
SAMPLE: DITCH SW SIDE SPARGE(8-1)
SUBMITTED BY: AC ANALYST: PB

AMOUNT=AREA(HGHT) * REF. ANNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	CYCLOPROPANE, 1-BROMO-1, 2-DICHLORO-	1	RIC	109	12.562	714	G	F	single ion only
2	2-PROPENAL, 3-(2-FURANYL)-	2	RIC	366	6.594	638	G	P	
3	FURAN, TETRAHYDRO-	3	RIC	438	100.000	984	G	G	hi-toxic(200 ppm);solvent for adhesives,inks,etc.
4	1-BUTANOL, 3-METHOXY-	4	RIC	468	10.183	738	G	G	
5	METHANE, DICHLORO-	5	RIC	506	38.760	941	G	G	common lab solvent
6	HEXANOICACID, 2-METHYL-3-OXO-, ETHYLESTER	6	RIC	641	22.742	627	P	P	mixture of hydrocarbon & chloroform
7	1, 3-DIOXANE	7	RIC	687	68.182	808	P	F	
8	MORPHOLINE	8	RIC	696	15.888	430	P		
9	1, 4-DIOXANE	9	RIC	724	12.912	846	G	G	hi-toxic(100 ppm) solvent for paint, etc.
10	BUTANENITRILE	10	RIC	777	9.957	801	G		hi-toxic basic material in indus.,chemical,pharm,industries
11	BENZENE, 1, 2-DIMETHYL-	11	RIC	902	21.918	931	G	G	C_2-benzene
12	DEUTERO CHLORBENZENE	12	RIC	937	72.094	930	G	G	internal std. @ 20 ppb
13	BENZENE, 1, 2, 3-TRIMETHYL-	13	RIC	1101	6.614	826	G	G	C_3-benzene

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QUANTITATION REPORT FILE: 0060

DATA: 0060 11
02/15/92 15:22:00
SAMPLE: B4 DITCH S W SIDE(B) BN SOIL EXT 0.5/10000UL 79.6 GRAMS
SUBMITTED BY: A.KOVEN ANALYST: SH

AMOUNT=AREA(HGHT) * PEF ANNIT/(REF AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	METHANE, DICHLORO-
2	2-PENTANONE, 4-HYDROXY-4-METHYL-
3	BICYCLO[3.1.0]HEXAN-2-ONE, 5-(1-METHYLETHYL)-
4	2-CYCLOHEXEN-1-ONE, 3-METHYL-
5	2-CYCLOHEXEN-1-ONE, 3,5,5-TRIMETHYL-
6	3,4-HEXANEDIONE, 2,2,5-TRIMETHYL-
7	BUTANE, 2,2-DIMETHYL-
8	UNDECANE
9	PENTANE, 1,3-EPOXY-4-METHYL-
10	UNDECANE, 2,4-DIMETHYL-
11	HEXANE, 3,3-DIMETHYL-
12	PROPANE, 2,2-DIMETHYL-
13	2-PENTENE, 5-BROMO-2,3-DIMETHYL-
14	2-PENTENE, 5-BROMO-2,3-DIMETHYL-
15	1-HEXENE, 3,5,5-TRIMETHYL-
16	HEXANE, 3,3-DIMETHYL-
17	DECANE, 6-ETHYL-2-METHYL-
18	CYCLOHEXANE, EICOSYL-
19	HEXANE, 3,3-DIMETHYL-
20	HEXANE, 2,2,5,5-TETRAMETHYL-
21	BUTANE, 2,2-DIMETHYL-
22	D-10 ANTHRACENE(INT. STD.)
23	HEXANE, 3,3-DIMETHYL-
24	UNDECANE, 2,4-DIMETHYL-
25	OCTANE, 2,7-DIMETHYL-
26	PYRIDINE, 4-PENTYL-
27	HYDROXYLAMINE, O-DECYL-
28	HYDROXYLAMINE, O-DECYL-
29	HYDROXYLAMINE, O-DECYL-
30	NITRIC ACID, NONYL ESTER
31	1-HEPTANOL, 2-PROPYL-
32	1-NONENE, 4,6,8-TRIMETHYL-
33	1-NONENE, 4,6,8-TRIMETHYL-
34	HYDROXYLAMINE, O-DECYL-
35	1-NONENE, 4,6,8-TRIMETHYL-
36	1-NONENE, 4,6,8-TRIMETHYL-
37	1-HEPTANOL, 2-PROPYL-

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	304	12.916	533			extraction solvent
2	RIC	335	100.000	983	G	G	acetone condensation product during extraction
3	RIC	749	0.887	815	G	G	
4	RIC	771	5.708	948	G	G	
5	RIC	875	6.103	931	G	G	
6	RIC	1192	0.676	840	G	G	
7	RIC	1305	0.331	792	G	F	hydrocarbon
8	RIC	1339	1.812	881	G	G	hydrocarbon
9	RIC	1362	0.325	710	G	G	
10	RIC	1425	0.878	824	G	G	hydrocarbon
11	RIC	1477	3.105	898	G	G	hydrocarbon
12	RIC	1498	0.479	283	G	P	
13	RIC	1542	0.506	791	P	F	
14	RIC	1546	0.644				
15	RIC	1560	0.421	725	P	F	unsaturated hydrocarbon
16	RIC	1607	4.507	904	G	G	hydrocarbon
17	RIC	1669	1.402	832	F	G	hydrocarbon
18	RIC	1679	0.416	764	F	F	
19	RIC	1731	4.586	906	G	G	hydrocarbon
20	RIC	1738	1.940	835	F	G	hydrocarbon
21	RIC	1784	0.603	801	F	F	hydrocarbon
22	RIC	1837	0.560	761	G	F	internal std. @ 15 ppb
23	RIC	1849	4.121	897	G	G	hydrocarbon
24	RIC	1860	1.205	817	G	G	hydrocarbon
25	RIC	1961	4.138	884	G	G	hydrocarbon
26	RIC	2032	0.432	288	F	P	
27	RIC	2069	2.897	862	G	G	probably hydrocarbon (2nd choice)
28	RIC	2172	2.654	842	G	G	probably hydrocarbon
29	RIC	2270	2.022	834	G	G	probably hydrocarbon
30	RIC	2306	0.470	713	G	P	very small amt compound
31	RIC	2363	1.613	804	G	F	hydrocarbon
32	RIC	2456	1.315	888	G	G	hydrocarbon
33	RIC	2543	1.971	850	G	G	hydrocarbon
34	RIC	2627	0.914	818	G	G	hydrocarbon
35	RIC	2710	1.127	797	G	F	hydrocarbon
36	RIC	2799	0.767	800	G	F	hydrocarbon
37	RIC	2804	0.794	788	G	F	hydrocarbon

QUANTITATION REPORT FILE: 0847

DATA: 0047.TI
02/11/82 13:55:00
SAMPLE: #4 DITCH S.W. SIDE (B) ACID SOIL EXT
CONDS.: 30-280@6°C/MIN HOLD 25 30M DB-5
FORMULA: . INSTRUMENT: GT WEIGHT: 0.000
SUBMITTED BY: A. KOVEN ANALYST: SH ACCT. NO.: VOSLSS

AMOUNT=AREA * REF.AMNT/(REF.AREA* RESP.FACT)

NO	NAME
1	METHANE,DICHLORO-
2	2(3H)-BENZOTHIAZOLONE

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	204	100.000	897			extraction solvent
2	RIC	1682	0.066	734			seen many times

QUANTITATION REPORT * FILE: 0670

DATA: 0670.T1
12/08/81 9:51:00
SAMPLE: WATER#9 BN 0.5UL/350ML/60ML
SUBMITTED BY: ANALYST: SH

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	METHANE, DICHLORO-
2	PENTANE, 2, 4-DIMETHYL-
3	1, 3, 6-OCTATRIENE, 3, 7-DIMETHYL-, (Z)-
4	BENZENE, 1-ETHYL-2-METHYL-
5	1-HEXANONE, 5-METHYL-1-PHENYL-
6	BENZENE, 1, 3, 5-TRIMETHYL-
7	HEXANE, 2, 3, 4-TRIMETHYL-
8	BENZENEMETHANOL, . ALPHA. -METHYL-. ALPHA. -2-PROPYNYL-
9	BICYCLO[2. 2. 1]HEPT-2-ENE, 1, 7, 7-TRIMETHYL-
10	NONANE, 4, 5-DIMETHYL-
11	PIPERIDINONE
12	HEXANE, 2, 2, 5, 5-TETRAMETHYL-
13	1-HEXENE, 3, 5, 5-TRIMETHYL-
14	HEXANE, 3, 3-DIMETHYL-
15	3, 6-OCTADECADIYNOICACID, METHYLESTER
16	2-CYCLOHEXEN-1-OL, 2-METHYL-5-(1-METHYLETHENYL)-, ACETATE, CIS-
17	UNDECANE
18	BENZENE, (2-PROPENYLOXY)-
19	HEXANE, 2, 2, 3, 3-TETRAMETHYL-
20	1-HEPTENE, 5-METHYL-
21	BENZENE, (1, 1-DIMETHYLETHYL)-
22	AZULENE
23	HEXANE, 3, 3-DIMETHYL-
24	BUTANE, 2, 2-DIMETHYL-
25	BUTANE, 2, 2-DIMETHYL-
26	HEXANE, 3, 3-DIMETHYL-
27	UNDECANE, 2, 4-DIMETHYL-
28	ISOOCTANE, (ETHENYLOXY)-
29	CYCLOHEXANE, OCTYL-
30	HEXANE, 3, 3-DIMETHYL-
31	HEXANE, 3, 3-DIMETHYL-
32	HEXANE, 3, 3-DIMETHYL-
33	HYDROXYLAMINE, O-DECYL-
34	OCTANE, 2, 4, 6-TRIMETHYL-
35	UNDECANE, 6, 6-DIMETHYL-
36	OCTANE, 2, 4, 6-TRIMETHYL-
37	OCTANE, 2, 4, 6-TRIMETHYL-
38	OCTANE, 2, 4, 6-TRIMETHYL-
39	OCTANE, 2, 4, 6-TRIMETHYL-
40	1-OCTANOL, 2-BUTYL-
41	OCTANE, 2, 7-DIMETHYL-
42	PENTANE, 3-ETHYL-2, 3-DIMETHYL-
43	OCTANE, 2, 4, 6-TRIMETHYL-
44	TETRACONTANE, 3, 5, 24-TRIMETHYL-
45	OCTANE, 4-CHLORO-
46	PROPIONICACID, 2, 2-DICHLORO-, PENTYLESTER
47	17-PENTATRIACONTENE
48	DECANE, 2, 3, 8-TRIMETHYL-

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	208	6.448	509	P	P	mixture-extraction solvent
2	RIC	218	7.773	854	P	G	hydrocarbon
3	RIC	260	4.043	879	G	F	unsaturated hydrocarbon
4	RIC	316	3.310	887	G	G	C_3 benzene
5	RIC	329	3.340	777	F	F	ketone
6	RIC	378	8.999	929	G	G	cumene-respiratory irritant
7	RIC	406	16.846	938	G	G	hydrocarbon
8	RIC	434	2.747	533	G	P	unknown
9	RIC	453	49.171	798	G	F	unsaturated hydrocarbon
10	RIC	467	2.995	792	P	F	hydrocarbon
11	RIC	492	2.968	749	P	P	unknown small peak
12	RIC	509	5.554	636	P	P	possibly hydrocarbon
13	RIC	536	6.955	841	P	G	second choice-C_8-alcohol-small peak
14	RIC	543	3.469	813	F	G	hydrocarbon
15	RIC	556	4.987	512	G	P	unknown small peak
16	RIC	573	3.297	619	P	P	unknown small peak
17	RIC	622	39.672	927	G	G	hydrocarbon
18	RIC	643	2.777	474	G	P	possibly aromatic-small peak
19	RIC	659	2.199	888	G	G	hydrocarbon
20	RIC	678	5.274	732	G	F	C_9 alcohol better choice
21	RIC	707	1.777	820	G	G	C_4 benzene
22	RIC	768	100.000	934	G	G	2nd choice, naphthalene-largest peak-moth repellant-PAH
23	RIC	836	23.435	836	G	G	hydrocarbon-octane isomer
24	RIC	865	4.781	851	G	G	2nd choice-iso-octane
25	RIC	986	3.385	739	G	G	3rd choice-methyl propyl pentanol
26	RIC	1041	9.500	931	G	G	octane isomer
27	RIC	1190	2.846	829	G	G	hydrocarbon
28	RIC	1237	15.252	864	G	G	2nd choice also likely-undecane
29	RIC	1306	1.334	760	F	F	hydrocarbon
30	RIC	1352	7.592	876	G	G	hydrocarbon
31	RIC	1424	20.213	918	G	G	hydrocarbon
32	RIC	1601	22.404	854	G	G	hydrocarbon
33	RIC	1683	16.780	805	P	G	hydrocarbon-2,4,6 trimethyl octane-3rd choice
34	RIC	1772	26.667	858	P	G	hydrocarbon
35	RIC	1780	21.543	791	P	G	hydrocarbon
36	RIC	1932	23.499	901	F	G	hydrocarbon
37	RIC	[illegible]	23.158	689	F	P	hydrocarbon
38	RIC	[illegible]	18.651	891	G	G	hydrocarbon
39	RIC	2232	13.644	873	G	G	hydrocarbon
40	RIC	2373	23.259	766	G	F	C_{12} alcohol
41	RIC	2510	15.655	844	G	G	hydrocarbon
42	RIC	2640	11.617	805	G	G	hydrocarbon
43	RIC	2765	15.725	881	G	G	hydrocarbon
44	RIC	2886	13.674	848	G	G	hydrocarbon
45	RIC	2938	25.200	488	G	P	unknown
46	RIC	3002	11.100	617	P	P	unknown
47	RIC	3113	4.975	598	G	P	hydrocarbon
48	RIC	3339	1.909	697	G	F	hydrocarbon

'ANTITATION REPORT FILE 0671

ATA: 0671.TT
/08/81 10.49:00
MPLE: WATER#9 ACID EXT 0.5/2000UL
RMITTED BY: ANALYST: SH

MOUNT=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
SP. FAC. FROM LIBRARY ENTRY

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	METHANE,DICHLORO-	1	RIC	206	2.312	901	G	G	extraction solvent
2	PHENOL	2	RIC	417	86.300	945	F	G	phenol topical anesthetic-from coal tar
3	PHENOL,2-METHYL-	3	RIC	546	31.447	910	G	G	cresol-fumigant disinfectant
4	PHENOL,3-METHYL-	4	RIC	635	100.000	891	G	G	cresol-isomer largest peak
5	PROPANENITRILE,2-METHYL-	5	RIC	700	8.130	558	G	P	poor match-unknown
6	2-PYRROLIDINONE,1-METHYL-	6	RIC	700	8.130	588	G	P	poor match-unknown
7	PHENOL,2-ETHYL-	7	RIC	731	6.383	940	F	G	ethyl phenol isomer*
8	PHENOL,2,5-DIMETHYL-	8	RIC	770	44.[illegible]	880	G	G	one possible isomer-very large peak*
9	PHENOL,3,4-DIMETHYL-	9	RIC	852	91.780	869	G	G	one possible isomer-very large peak*
10	PHENOL,3,4-DIMETHYL-	10	RIC	889	50.020	803	G	G	one possible isomer-very large peak*
11	PHENOL,2-ETHYL-5-METHYL-	11	RIC	956	16.216	791	G	G	C_3-phenol-large peak*
12	PHENOL,4-ETHYL-2-METHYL-	12	RIC	1006	30.985	767	G	G	C_3-phenol-large peak*
13	PHENOL,4-ETHYL-2-METHYL-	13	RIC	1034	3.304	872	G	G	C_3-phenol*
14	PHENOL,3-(1,1-DIMETHYLETHYL)-	14	RIC	1061	2.762	842	G	G	C_4 phenol*
15	PHENOL,2-(2-PROPENYL)-	15	RIC	1095	3.507	623	G	F	poor match-possibly a phenol*
16	BENZENEACETICACID	16	RIC	1135	2.587	608	F	P	poor match-mixture-o-toluic acid*
17	DIAZENE,ETHYLPHENYL-,2-OXIDE,(E)-	17	RIC	1182	2.171	536	P	P	poor match-unknown
18	1,3-DIOXOL-2-ONE	18	RIC	1219	3.012	585	P	P	poor match-unknown
19	BENZENEPROPANOICACID	19	RIC	1264	3.528	911	F	G	hydrocinnamic acid
20	CYCLOPENTANE,1,1-DIMETHYL-	20	RIC	1279	1.016	540	F	P	poor match-hydrocarbon?
21	1-HEXENE,3,4,5-TRIMETHYL-	21	RIC	1597	0.812	715	F	P	poor match-hydrocarbon-small peak
22	BENZENEBUTANOICACID,2,5-DIMETHYL-	22	RIC	1627	3.500	834	F	P	
23	UNDECANE,2,4-DIMETHYL-	23	RIC	1770	0.440	827	P	G	hydrocarbon
24	3,4-HEXANEDIONE,2,2,5-TRIMETHYL-	24	RIC	1930	0.246	857	F	G	hydrocarbon
25	3,4-HEXANEDIONE,2,2,5-TRIMETHYL-	25	RIC	2083	0.257	820	G	G	hydrocarbon
26	1,2-BENZENEDICARBOXYLICACID,BUTYL2-METHYLPROPYLESTER	26	RIC	2170	1.090	784	G	G	pthalate-plastisizer-possible contamina
27	CYCLOPENTANE,(2-METHYL-1-PROPENYL)-	27	RIC	2197	0.607	515	G	P	hydrocarbon mixture-poor match
28	CYCLOHEXANECARBOXYLICACID,4-(1,5-DIMETHYL-3-OXOHEXYL)-,METHYLESTER,C	28	RIC	2238	1.956	495	G	P	poor match
29	1-NONENE,4,6,8-TRIMETHYL-	29	RIC	2370	0.418	771	G	P	hydrocarbon-small peak-carry over from
30	UNDECANE,2,4-DIMETHYL-			2506	0.515	822	G	G	hydrocarbon-small peak
31	UNDECANE,2,4-DIMETHYL-	31	RIC	2635	0.741	859	G	G	hydrocarbon-small peak
32	HYDROXYLAMINE,O-DECYL-	32	RIC	2761	0.889	845	G	G	hydrocarbon
33	HEPTADECANE,9-OCTYL-	33	RIC	2802	0.933	196	G	P	poor match-unknown carry over from bas
34	1-NONENE,4,6,8-TRIMETHYL-	34	RIC	2882	0.906	825	G	G	hydrocarbon
35	OCTANE,2-BROMO-	35	RIC	[illegible]	1.777	414	G	P	poor match-hydrocarbon-carry over from
36	UNDECANE,2,4-DIMETHYL-	36	RIC	[illegible]	0.291	783	G	G	poor match-hydrocarbon-carry over from

* phenols cause nausea, large doses ca
respiratory failure, coma

DATA: 0744.TI
01/06/82 12:19:00
SAMPLE: TEST WELL ON SITE ONLY 1CC SPARGE
SUBMITTED BY: AC ANALYST: PB

AMOUNT=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

36

NO	NAME
1	1-BUTENE
2	HEXANE
3	HEXANE, 2-METHYL-
4	HEXANE, 3-METHYL-
5	HEPTANE
6	CYCLOPENTANE, 1, 2-DIMETHYL-, CIS-
7	CYCLOHEXANE
8	BUTANE, 2-AZIDO-2, 3, 3-TRIMETHYL-
9	HEPTANE, 3-METHYL-
10	CYCLOHEXANE, METHYL-
11	OCTANE
12	HEPTANE, 2, 6-DIMETHYL-
13	ETHANEDIOICACID
14	HEPTANE, 2, 4-DIMETHYL-
15	OCTANE, 3-METHYL-
16	FURAN, TETRAHYDRO-
17	HEXANE, 2, 3, 4-TRIMETHYL-
18	2-PROPANONE, OXIME
19	HYDROXYLAMINE, O-(2-METHYLPROPYL)-
20	FURAN, 2, 3-DIHYDRO-4-(1-METHYLPROPYL)-, (S)-
21	6-UNDECANONE
22	NONANE, 2, 3-DIMETHYL-
23	CYCLOHEXANE, 1-ETHYL-2-METHYL-, TRANS-
24	1-DODECANOL, 2-METHYL-, (S)-
25	HEXANE, 3-ETHYL-3-METHYL-
26	HEXANE, 3, 3, 4, 4-TETRAMETHYL-
27	2, 4-PENTANEDIONE
28	1-BUTENE, 3-METHYL-
29	3-OCTEN-5-YNE, 2, 7-DIMETHYL-, (Z)-
30	DECANE, 2-METHYL-
31	BENZENE, METHYL-
32	CYCLOPROPANE, 1-BUTYL-1-METHYL-2-PROPYL-
33	1H-INDENE, OCTAHYDRO-, TRANS-
34	2(1H)-BENZOCYCLOOCTENONE, DECAHYDRO-10A-METHYL-, TRANS-
35	DECANE, 2, 3, 6-TRIMETHYL-
36	HYDROXYLAMINE, O-DECYL-
37	NONANE, 3, 7-DIMETHYL-
38	CYCLOHEXANE, 1, 2-DIETHYL-3-METHYL-
39	CYCLOOCTANE, 1, 4-DIMETHYL-, TRANS-
40	CYCLODECANOL
41	BICYCLO[3. 1. 1]HEPTANE, 6, 6-DIMETHYL-2-METHYLENE-, [illegible]
42	1H-1, 2, 4-TRIAZOLE, 1-BUTYL-
43	PYRIDINE, 3-ETHYL-
44	PYRIDINE, 3-ETHYL-
45	PYRIDINE, 3-ETHYL-
46	BICYCLO[3. 1. 0]HEXANE, 6-ISOPROPYLIDENE-1-METHYL-
47	ISOOCTANOL
48	CYCLOHEXENE, 1, 2-DIMETHYL-
49	HYDROXYLAMINE, O-DECYL-
50	PYRIDINE, 3-ETHYL-
51	1, 6-OCTADIEN-3-OL, 3, 7-DIMETHYL-, PROPANOATE
52	BENZENE, 1-METHYL-2-NITRO-
53	NAPHTHALENE, DECAHYDRO-2-METHYL-

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	129	0.275	846	G	G	2-Methyl-1-propene also good Gas;simple asphyxiant
2	RIC	164	0.388	907	G	G	hydrocarbon;solvent
3	RIC	193	0.163	896	G	G	hydrocarbon
4	RIC	202	0.335	945	G	G	hydrocarbon
5	RIC	219	0.690	972	G	G	mod-toxic(500 ppm)hydrocarbon solvent, anesthetic
6	RIC	244	0.280	813	G	F	cyclopentane mod-toxic hydrocarbon
7	RIC	255	0.348	757	F	F	mod-toxic hydrocarbon
8	RIC	269	1.263	850	G	G	
9	RIC	284	0.718	931	G	G	hydrocarbon
10	RIC	300	0.804	956	G	G	mod-toxic(500 ppm) hydrocarbon solvent for cellulose ethers
11	RIC	315	2.433	983	G	G	mod-toxic(400 ppm) hydrocarbon;solvent
12	RIC	328	1.090	941	G	G	hydrocarbon
13	RIC	345	57.249	302	G	P	acetone
14	RIC	390	6.073	875	G	G	2-methyl octane hydrocarbon
15	RIC	406	4.226	928	G	G	hydrocarbon
16	RIC	421	14.731	795	G	F	hi-toxic(200 ppm),irritant solvent for resins,adhesives
17	RIC	453	27.025	775	G	F	hydrocarbon
18	RIC	470	40.822	475	G	P	2-butanone
19	RIC	489	23.311	435	G	P	dimethyl octane hydrocarbon
20	RIC	520	16.617	744	G	F	trimethylpentene hydrocarbon
21	RIC	541	43.503	629	G	F	undecane hydrocarbon
22	RIC	560	16.961	912	G	G	hydrocarbon
23	RIC	571	3.949	782	F	G	hydrocarbon
24	RIC	590	17.537	466	G	P	hydrocarbon plus alcohol ?
25	RIC	614	62.566	772	P	F	chromatogram indicates mixture possible
26	RIC	626	11.429	657	P	F	dimethyl nonene hydrocarbon
27	RIC	644	42.755	628	G	P	large amt acetylacetone?-solvent for cellulose acetate,etc.
28	RIC	661	5.604	477	G	P	
29	RIC	673	47.417	536	G	P	C_3 benzene (cumene)
30	RIC	680	17.200	666	P	F	probably decane, 2-methyl
31	RIC	688	39.079	314	P	P	large amt unknown 91,92 ions prominent,toluene deri.
32	RIC	701	3.565	841	P	F	hydrocarbon
33	RIC	707	3.238	481	P	P	
34	RIC	718	0.336	634	F	P	
35	RIC	739	59.194	673	G	F	hydrocarbon, possible 0,1'-oxybis decane
36	RIC	750	5.031	632	P	F	
37	RIC	761	4.743	673	P	F	hydrocarbon
38	RIC	772	2.445	781	G	F	hydrocarbon
39	RIC	781	1.775	885	G	G	hydrocarbon
40	RIC	792	5.866	753	P	F	
	RIC	799	19.081	644	P	P	
	RIC	811	0.606	534	F	P	
43	RIC	821	40.782	509	G	F	ethyl benzene
44	RIC	834	40.143	480	F	F	C_2 benzene
45	RIC	847	88.178	377	F	P	C_8H_{10}, C_2 benzene
46	RIC	860	11.287	801	P	F	possibly a dimethyl octatriene, unsat. hydrocarbon etc.
47	RIC	878	0.486	661	G	P	
48	RIC	892	28.203	462	P	P	
49	RIC	899	9.521	773	P	F	
50	RIC	913	65.557	381	G	P	C_2 benzene
51	RIC	934	100.000	484	G	P	unsat. hydrocarbon, turpene ?
52	RIC	945	11.727	582	P	P	propyl benzene
53	RIC	957	1.160	920	G	G	mod-toxic,irritant solv. for oils,fat,waxes,resins,etc.

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
54	CYCLOPENTENE, 1-ETHENYL-3-METHYLENE -	54	RIC	966	43.7[illegible]	475	G	P	C_3-benzene
55	THIIRANE	55	RIC	903	0.457	632	F	F	
56	PYRIDINE, 5-ETHYL-2-METHYL-	56	RIC	992	32.257	483	G	P	C_3-benzene
57	BENZENEACETALDEHYDE, . ALPHA. -METHYL-	57	RIC	1000	4.857	826	P	G	benzene acetaldehyde used in perfumes
58	1,4-CYCLOHEXADIENE, 3-ETHENYL-1,2-DIMETHYL-	58	RIC	1017	24.710	591	G	P	C_3-benzene
59	BENZENE, 1-METHYL-3-(1-METHYLETHYL)-	59	RIC	1025	9.946	794	P	G	C_4-benzene
60	BENZENAMINE, N-ETHYL-2-METHYL -	60	RIC	1045	63.622	478	G	F	C_3-benzene
61	BENZENE, 1-METHYL-4-PROPYL-	61	RIC	1067	19.591	825	F	G	cymene, C_4-benzene; mod-toxic, solvent, synthetic resins
62	BENZENE, (2-METHYLPROPYL)-	62	RIC	1080	6.582	900	P	G	C_4-benzene
63	BENZENE, 1-ETHYL-2,3-DIMETHYL-	63	RIC	1092	11.905	826	G	G	C_4-benzene
64	BENZENEACETALDEHYDE, . ALPHA. -METHYL-	64	RIC	1111	4.480	868	F	G	benzene acetaldehyde used in perfumes
65	PYRIDINE, 3-ETHYL-5-METHYL-	65	RIC	1118	22.360	619	P	P	C_3-benzene
66	BENZENE, 1-ETHYL-2,3-DIMETHYL-	66	RIC	1129	6.027	866	F	G	C_4-benzene
67	BENZENE, 1-ETHYL-2,3-DIMETHYL-	67	RIC	1139	6.334	861		G	C_4-benzene
68	BENZENE, 1-ETHYL-2,3-DIMETHYL-	68	RIC	1149	12.835	807		G	C_4-benzene
69	1H-INDENE, 2,3-DIHYDRO-	69	RIC	1167	7.978	917	G	G	occurs in coal tar, crude, etc.
70	BENZENE, DIETHYLMETHYL-	70	RIC	1175	1.874	741	P	P	C_5-benzene
71	BENZENE, DIETHYLMETHYL-	71	RIC	1180	1.133	525	P	G	unknown
72	BENZALDEHYDE, 2,4,5-TRIMETHYL-	72	RIC	1175	1.891				computer error
73	BENZALDEHYDE, 2,4,5-TRIMETHYL-	73	RIC	1180	1.138	933	P	G	cyclohexanone (50 ppm) used in organic synthesis etc.
74	CYCLOHEXANONE, 3,3,5-TRIMETHYL-	74	RIC	1188	7.867	815	P	F	ethyl styrene, styrene-irritant, plastics
75	BENZENE, 1-ETHENYL-4-ETHYL-	75	RIC	1196	2.446	873	G	G	C_4-benzene
76	BENZENE, 2-ETHYL-1,3-DIMETHYL-	76	RIC	1206	1.812	535	F	P	unknown
77	BICYCLO[3.1.0]HEXAN-3-ONE, 4-METHYL-1-(1-METHYLETHYL)-, [1S-(1.ALPHA.,	77	RIC	1214	1.975	910	F	G	occurs in coal tar
78	BENZENE, 1,2,3,5-TETRAMETHYL-	78	RIC	1224	3.728	477	G	P	may be mixture or cmpd not in library
79	BENZENE, 1,4-DICHLORO-	79	RIC	1241	16.815	737	G	P	unknown
80	CYCLOHEXENE, 1,2-DIMETHYL-	80	RIC	1267	0.945	271	P	P	unknown
81	DISILOXANE, PENTAMETHYL-	81	RIC	1292	0.125				computer error
82	DISILOXANE, PENTAMETHYL-	82	RIC	1295	0.073	816	P	F	styrene type again
83	BENZENE, 1-ETHENYL-4-ETHYL-	83	RIC	1302	1.633	859	G	G	C_4-benzene
84	BENZENE, 1,2,3,5-TETRAMETHYL-	84	RIC	1315	6.977	904	G	G	occurs in coal tar
85	1H-INDENE, 2,3-DIHYDRO-4-METHYL-	85	RIC	1340	2.844	629	F	P	unknown
86	1-HEPTENE, 5-METHOXY-4-METHYL-	86	RIC	1356	1.182	483	P	P	unknown
87	BENZENE, (3-CHLORO-3-METHYLBUTYL)-	87	RIC	1367	0.248	666	P	F	unknown
88	NAPHTHALENE, 1,2,3,4-TETRAHYDRO-	88	RIC	1384	0.839	793	P	F	
89	BICYCLO[2.2.1]HEPTAN-2-ONE, 1,7,7-TRIMETHYL-	89	RIC	1391	3.353	370	G	P	unknown
90	BENZENE, (3,3-DIMETHYL-4-PENTENYL)-	90	RIC	1427	0.254				computer error
91	BENZENE, (3,3-DIMETHYL-4-PENTENYL)-	91	RIC	1432	0.358	530	G	P	unknown
92	2-FURANMETHANOL, TETRAHYDRO-. ALPHA. ,. ALPHA. ,5-TRIMETHYL-5-(4-METHYL-3	92	RIC	1453	0.802	414		P	unknown
93	1,2-NAPHTHALENEDIOL, 1-ETHYL-1,2,3,4-TETRAHYDRO-, CIS-	93	RIC	1469	0.192	434		P	unknown
94	BENZENE, 1-(1,5-DIMETHYL-4-HEXENYL)-4-METHYL-	94	RIC	1475	0.185	376		P	unknown
95	2H-PYRAN-2-ONE, 6-(P-BROMOPHENYL)-3,4-DIPHENYL-	95	RIC	1515	0.148				computer error
96	2H-PYRAN-2-ONE, 6-(P-BROMOPHENYL)-3,4-DIPHENYL-	96	RIC	1518	0.236	255		P	unknown
97	BENZENE, 1-ETHYL-2,3-DIMETHYL-	97	RIC	1535	0.320	377		P	unknown
98	CYCLOHEXANONE, 4-HYDROXY-4-METHYL-	98	RIC	1541	0.253				computer error
99	CYCLOHEXANONE, 4-HYDROXY-4-METHYL-	99	RIC	1552	0.496	764	P	G	
100	1,2-PROPANEDIONE, 1-PHENYL-	100	RIC	1548	0.253				computer error
101	1,2-PROPANEDIONE, 1-PHENYL-	101	RIC	1552	0.496	627		F	
102	7-OCTEN-2-OL, 2-METHYL-6-METHYLENE-	102	RIC	1590	0.808	387		P	unknown
103	2,8-DECADIYNE	103	RIC	1598	0.262	541	G	P	azulene-used in cosmetics, naphthalene-mod-toxic (10 ppm)
104	2,3-PYRIDINEDICARBONITRILE	104	RIC	1747	64.853	514		P	unknown
105	2,6-PIPERAZINEDIONE, MONOOXIME	105	RIC	1764	0.148				computer error
106	2,6-PIPERAZINEDIONE, MONOOXIME	106	RIC	1767	0.147	444		P	unknown
107	2-BUTENOICACID, 2-METHOXY-3-METHYL-, METHYLESTER	107	RIC	1764	0.148				
108	2-BUTENOICACID, 2-METHOXY-3-METHYL-, METHYLESTER	108	RIC	1767	0.147	328		P	unknown
109	HEXANEDIOICACID, BIS(1,3-DIMETHYLBUTYL)ESTER	109	RIC	1794	0.358	365		P	unknown
110	2,3-PYRIDINEDICARBONITRILE	110	RIC	1802	0.294	321		P	unknown
111	HEXANOICACID, 2-(1-METHYLETHYL)-5-OXO-, METHYLESTER, (S)-	111	RIC	1829	0.261	479		F	probably small amt of naphthalene, mod-toxic (10 ppm) fungicide
112	NAPHTHALENE	112	RIC	1846	0.171	859		G	mfr of pharmaceuticals
113	BENZO[B]THIOPHENE	113	RIC	1[illegible]	1.188	682		F	prob. 4-chloro-3-methyl phenol, may be toxic, used as germicide
114	PHENOL, 2-CHLORO-6-METHYL-	114	RIC	1[illegible]	1.305				

NTIFICATION REPORT FILE: 0743

A: 0743 11
06/87 10:53:00
PLE: LEACHATE CULVERT RECEIVED JAN 6
MITTED BY: AC ANALYST: PB

38

UNT: AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT) * RESP. FACT)
P. FAC FROM LIBRARY ENTRY

NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
PENTANE, 1-(2-PROPENYLOXY)-	1	RIC	337	1.746	662	G	P	unknown
FURAN, TETRAHYDRO-	2	RIC	409	75.321	914	G	G	hi-toxic solvent (200 ppm);adhesives, etc.
PROPANE, 1-ETHOXY-2-METHYL-	3	RIC	434	3.170	816	G	F	
METHANE, DICHLORO-	4	RIC	476	5.411	938	G	G	common solvent
BENZENE	5	RIC	521	4.319	967	G	G	hi-toxic (25 ppm); common solvent
ETHANE, 1,1-DICHLORO	6	RIC	573	0.680	915	G	G	vinylidene chloride-skin irritant; prodn. of savan, etc.
ETHENE, TRICHLORO-	7	RIC	586	22.352	947	G	G	toxic;solvent for waxes,paints,etc.
3-PENTANONE, 2,4-DIMETHYL-	8	RIC	617	2.154	744	P	P	
2-PENTANONE, 4-METHYL-	9	RIC	623	1.255	798	P	F	small amt cmpd - solvent for gums, resins
OXIRANE, 2-ETHYL-3-PROPYL-, TRANS-	10	RIC	644	1.074	645	P	P	small amt cmpd
PENTANAL, 2,4-DIMETHYL-	11	RIC	644	1.074	615	P	F	
.ALPHA.-D-GALACTOPYRANOSIDE, METHYL 3,6-ANHYDRO-	12	RIC	657	1.077	464	P	P	
BENZENE, METHYL	13	RIC	667	29.084	985	G	G	toluene-mod-toxic (200 ppm);solvent for paints, gums resins
1,4-DIOXANE	14	RIC	709	3.157	959	G	G	hi-toxic (100 ppm);solvent for cellulose,paints,cosmetics
BUTANAL, 2-ETHYL-	15	RIC	741	0.880	780	G	F	solvent for oils, resins,waxes,dyes,perfumes
BUTANENITRILE	16	RIC	762	1.064	812	G	G	few ions;hi-toxic;basic industrial material
BENZENE, ETHYL-	17	RIC	803	40.392	950	G	G	mod-toxic (100 ppm) solvent;prodn of styrene
CYCLOPENTENE, 1-ETHENYL-3-METHYLENE-	18	RIC	815	51.467	942	F	G	dimethylbenzene good 2nd choice/isomer?
CYCLOPENTENE, 1-ETHENYL-3-METHYLENE-	19	RIC	825	100.000	897	F	G	dimethylbenzene good 2nd choice/isomer?
PROPANE, 1,1,1-TRIMETHOXY-	20	RIC	836	0.385	546	P	P	
PROPANE, 1,1,1-TRIMETHOXY-	21	RIC	840	0.767				computer error
CYCLOPENTENE, 1-ETHENYL-3-METHYLENE-	22	RIC	836	0.385	608	P	P	
CYCLOPENTENE, 1-ETHENYL-3-METHYLENE-	23	RIC	840	0.767				computer error
4-HEPTANONE, 2,6-DIMETHYL-	24	RIC	868	2.766	857	P	G	
4-HEPTANONE, 2,6-DIMETHYL-	25	RIC	872	1.167				computer error
BENZENE, (1-METHYLETHYL)	26	RIC	868	2.521	864	P	G	C3-benzene,found in American petroleum
BENZENE, (1-METHYLETHYL)-	27	RIC	872	1.167				computer error repeat
CYCLOPENTENE, 1-ETHENYL-3-METHYLENE-	28	RIC	892	75.251	905	G	G	dimethylbenzene good 2nd choice/isomer?
BUTANE, 1,1'-OXYBIS-	29	RIC	917	1.337	828	F	F	
DEUTERO CHLOROBENZENE	30	RIC	927	5.190	943	G	G	internal std. @ 20 ppb
BENZENE, 1-ETHYL-2-METHYL-	31	RIC	944	7.187	919	G	G	C3-benzene
BENZENEETHANOL, .ALPHA., .BETA.,-DIMETHYL-	32	RIC	960	1.083	352	P	P	
BENZENE, 1,2,3-TRIMETHYL-	33	RIC	971	4.390	922	G	G	C3-benzene
BENZENE, 1-ETHYL-2-METHYL-	34	RIC	996	5.210	907	G	G	C3-benzene
BENZENE, 1,3,5-TRIMETHYL-	35	RIC	1023	14.027	911	G	G	C3-benzene
BENZENE, ETHYL-	36	RIC	1032	0.364	532	P	P	
BENZENE, 1,2,3,4-TETRAMETHYL-	37	RIC	1043	0.403	510	P	P	C4-benzene
BENZENE, 1,2,3,4-TETRAMETHYL-	38	RIC	1046	1.050				computer error
BENZENE, 1-METHYL-4-PROPYL-	39	RIC	1043	0.403	851	P	G	C4-benzene
BENZENE, 1-METHYL-4-PROPYL-	40	RIC	1046	1.050				computer error
1,3,5-TRIAZOLIDE, 1,3-ATHYPAZINE	41	RIC	1052	0.361	350	P	P	
HYDROXYLAMINE, O-(PHENYLMETHYL)-	42	RIC	1060	0.764	610	P	P	
BENZENE, 1-METHYL-4-(1-METHYLETHYL)-	43	RIC	1071	2.097	874	F	G	C4-benzene
BENZENE, 1-ETHYL-2-METHYL-	44	RIC	1076	[illegible]	910	G	G	C3-benzene
BENZENE, 1-METHYL-4-(1-METHYLETHYL)-	[illegible]	RIC	[illegible]	[illegible]	845	F	G	C4-benzene
NAPHTHALENE, 1,2-DIHYDRO-	[illegible]	RIC	1142	[illegible]	907	G	G	occurs in coal tar

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
47	CYCLOHEXANE, AZIDO-	47	RIC	1147	9.671	683	G	F	
48	BI-2-CYCLOHEXEN-1-YL	48	RIC	1192	2.050	589	F	P	
49	1H-PYRAZOLE, 4-BROMO	49	RIC	1218	2.015	459	P	P	
50	1-HEXENE, 3,5,5-TRIMETHYL-	50	RIC	1232	2.615	833	P	F	
51	1H-INDENE	51	RIC	1289	2.642	601	P	F	may be mixture of C_4-benzene + Indene
52	BENZENE, (1-ETHYL-2-PROPENYL)-	52	RIC	1316	0.680	741	F	F	C_4-benzene
53	1-OCTEN-3-OL, 3,7-DIMETHYL-	53	RIC	1330	0.723	402	P	P	
54	BICYCLO[2.2.1]HEPTAN-2-ONE, 1,7,7-TRIMETHYL-	54	RIC	1360	0.211	766	G	G	other matches good
55	BICYCLO[2.2.1]HEPTAN-2-ONE, 1,7,7-TRIMETHYL-	55	RIC	1365	2.330				computer error

CITATION REPORT FILE: 1166

1166.11
/82 15:14:00
LE: CCULVERT LEACHATE 0.2/500UL ACID EXT 10PPB D-10
ITTED BY: A.KOVEN ANALYST: SH

NT=AREA(HGHT) * REF.ANNT/(REF AREA(HGHT)* RESP.FACT)
FAC. FROM LIBRARY ENTRY

NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
HYDRAZINE,ETHYL-,ETHANEDIOATE(1:1)	1	RIC	272	6.675	672	P	F	
HYDRAZINE,ETHYL-,ETHANEDIOATE(1:1)	2	RIC	277	4.477				computer error
1-PROPENE,2-FLUORO-	3	RIC	272	4.740	542	P	P	
1-PROPENE,2-FLUORO-	4	RIC	277	3.973				computer error
BENZENESULFONICACID,4-METHOXY-,HYDRAZIDE	5	RIC	287	5.157	342			
BUTANOICACID,3-METHYL-	6	RIC	287	4.883	794	P	F	
PROPANE,2-BROMO-2-METHYL-	7	RIC	335	3.652	664	P	P	
HEPTANOICACID	8	RIC	341	2.663	473	P	P	
HYDRAZINE,1,2-DIMETHYL-	9	RIC	358	3.716	851	P	P	ethoxy acetic acid (3rd choice)
PHENOL	10	RIC	392	6.036	838	G	G	phenol
SILANE,(2-ETHYL-1-METHYL-1-BUTENYL)TRIMETHYL-	11	RIC	413	7.510	376	G	P	wrong match
BUTANOICACID,2-METHYL-	12	RIC	436	10.901	890	G	G	2-methyl butanoic acid
FORMICACID,1-METHYLETHYLESTER	13	RIC	456	5.064	717	G	F	3-methyl-2-butanol (2nd choice)
FORMICACID,METHYLESTER	14	RIC	456	5.064	602	P	P	
BUTANOICACID	15	RIC	464	2.981				computer error
PHENOL,2-METHYL-	16	RIC	464	3.000	777	P	G	butanoic acid
PHENOL,2,6-DIMETHYL-	17	RIC	483	4.867	938	G	G	methyl phenol
PHENOL,3,4-DIMETHYL-	18	RIC	546	4.435	891	G	G	dimethyl phenol
PROPANE,2-ETHOXY-	19	RIC	600	31.331	897	G	G	dimethyl phenol
BUTANOICACID,3-METHYL-	20	RIC	616	13.463	652	P	F	
PHENOL,2,3-DIMETHYL-	21	RIC	631	24.894	563	F	P	
PHENOL,2,3-DIMETHYL-	22	RIC	639	14.031	689	F	F	dimethyl phenol
BUTANOICACID,METHYLESTER	23	RIC	643	3.892				computer error
3-HEXANOL,2,5-DIMETHYL-	24	RIC	650	8.010	518	P	P	
OCTANOICACID	25	RIC	675	41.946	655	F	F	C-8 alcohol
6-HEPTEN-3-ONE,4-METHYL-	26	RIC	690	41.198	577	F	F	
6-HEPTEN-3-ONE,4-METHYL-	27	RIC	690	29.380	473	P	P	
CYCLOHEXANEETHANOL	28	RIC	694	4.588				computer error
CYCLOHEXANEETHANOL	29	RIC	717	13.717	503	P	P	
OCTANOICACID	30	RIC	721	4.731				computer error
OCTANOICACID	31	RIC	717	13.771	724	F	G	
OCTANOICACID	32	RIC	721	4.835				computer error
BENZENE,(1-METHOXYETHYL)-	33	RIC	725	12.136				computer error
BENZENE,(1-METHOXYETHYL)-	34	RIC	721	3.543	354	P	P	
BUTANOICACID,3,3-DIMETHYL-2-(1-METHYLETHYL)-,METHYLESTER	35	RIC	725	10.132				computer error
CEPHACYCLOPENTANE,1-PROPYL-	36	RIC	732	11.114	407	P	P	
PHENOL,4-(1,1-DIMETHYLETHYL)-	37	RIC	754	11.587	270	P	P	
BUTANOICACID,4-BUTOXY-	38	RIC	801	31.079	815	G	G	C_4-phenol
NITROACETICACID,3-METHYLBUTYLESTER	39	RIC	845	17.442	755	F	F	
BUTANEDIOICACID,2,3-DIMETHYL-,DIBUTYLESTER	40	RIC	867	23.731	350	P	P	
4-[illegible],4,7-DIMETHYL	41	RIC	870	19.575	416	F	F	
[illegible]	42	RIC	885	35.771	657	P	P	
[illegible]	43	RIC	[illegible]	10.759	356	P	P	
Benzene, (2-methyl-3 Butenyl)	44	RIC	898	8.563				computer error
Benzene, (2-methyl-3 Butenyl)	45	RIC	903	5.579				computer error
Ethanol, 2-Bromo-,Acetate	46	RIC	898	8.745	345	P	P	

NO	NAME
17	ETHANOL, 2-BROMO-, ACETATE
18	3-HEPTANOL, 3,6-DIMETHYL-
49	PENTANE, 1,1'-OXYBIS
50	3-HEPTANOL, 3,6-DIMETHYL-
51	BENZENEPROPANOICACID
52	ETHANOL, 2-(2-BUTOXYETHOXY)-
53	BENZENEACETICACID, ALPHA.-ETHYL-
54	BENZENEACETICACID, ALPHA.-ETHYL-
55	2-OXAZOLIDINONE, 3-(2-HYDROXYPROPYL)-5-METHYL-
56	2-HEPTANAMINE, 6-METHYL-
57	PENTANE, 2-BUTOXY-
58	BENZENEBUTANOICACID, 2,5-DIMETHYL-
59	BENZENEPROPANOICACID, ALPHA.,.BETA.-DIMETHYL-
60	BENZOICACID, 4-(1,1-DIMETHYLETHYL)-
61	BENZOICACID, 4-(1,1-DIMETHYLETHYL)-
62	1,3-DIOXANE, 2-METHYL-
63	1,3-DIOXANE, 2-METHYL-
64	BENZENEBUTANOICACID, BETA.-METHYL-
65	BUTYRICACID, 4-BUTOXY-, METHYLESTER
66	BENZENEBUTANOICACID, 2,5-DIMETHYL-
67	ETHANOL, 2-(2-BUTOXYETHOXY)-
68	[1,1'-BIPHENYL]-2,2'-DIOL
69	2(3H)-BENZOTHIAZOLONE
70	1,4-NAPHTHALENEDIONE, 2-HYDROXY-3-(3-METHYL-2-BUTENYL)-
71	BENZENE, 1-METHOXY-3-PHENOXY-
72	D-10 ANTHRACENE(INT. STD.)
73	1-DIBENZOFURANCARBOXYLICACID, 1,9B-DIHYDRO-4,9B-DIMETHYL-, METHYLESTER
74	PHENOL, 2,2'-METHYLENEBIS-
75	PHENOL, 2,2'-METHYLENEBIS-
76	OCTACOSANE
77	PHENOL, 2-[1-(4-HYDROXYPHENYL)-1-METHYLETHYL]-
78	1-NONENE, 4,6,8-TRIMETHYL-
79	TETRADECANE, 1-CHLORO-
80	BICYCLO[3.1.0]HEXAN-2-OL, 2-METHYL-5-(1-METHYLETHYL)-
81	METHANETHIOL

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
47	RIC	[illegible]	5.572				computer error
48	RIC	[illegible]	13.353	609	P	F	C_7-heptanol
49	RIC	916	29.669	622	P	F	
50	RIC	923	16.742	724	P	P	C_7-heptanol
51	RIC	935	4.801	571	P	F	benzenepropanoic acid
52	RIC	960	100.000	547	F	F	
53	RIC	965	11.070	348	P	P	
54	RIC	987	21.620	687	P	G	
55	RIC	1017	21.854	364	P	P	
56	RIC	1029	6.348	444	P	P	
57	RIC	1041	2.694	407	P	P	
58	RIC	1054	4.177	506	P	P	
59	RIC	1073	2.721	355	P	F	
60	RIC	1096	40.387	851	F	G	C_4-benzoic acid
61	RIC	1101	3.963				computer error
62	RIC	1096	28.230	566	P	P	
63	RIC	1101	3.654				computer error
64	RIC	1112	5.006	316	P	F	
65	RIC	1128	1.854	459	P	P	
66	RIC	1151	12.056	670	P	G	
67	RIC	1215	3.859	325	P	P	
68	RIC	1226	2.330	646	P	G	
69	RIC	1257	20.356	685	F	G	2(3H) benzothiazolone
70	RIC	1264	1.781	578	P	F	
71	RIC	1323	4.127	453	P	F	
72	RIC	1331	6.243	750	P	G	D-10 anthracene int. std
73	RIC	1351	3.037	697	G	G	44'-methylene bis 2,6 dimethyl -pheno
74	RIC	1526	1.940	646	F	G	
75	RIC	1550	3.129	731	G	G	
76	RIC	1679	0.659	664	F	G	
77	RIC	1699	1.287	658	F	G	
78	RIC	1833	0.377	756	F	G	
79	RIC	1909	1.567	655	F	F	2-oxo-hexadecanoic acid methylester (
80	RIC	2640	54.242	211	G	P	
81	RIC	2710	69.580	278	G	P	sulfur cmpd

QUANTITATION REPORT FILE: 1165

DATA: 1165.TI
04/07/82 14:07:00
SAMPLE: CULVERT LEACHATE 0.2/500UL BN EXT 10PPB D-10
SUBMITTED BY: A.KOVEN ANALYST: SH

AMOUNT=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	SYDNONE, 4-METHYL-3-PHENYL-
2	2-CYCLOHEXEN-1-ONE, 3, 5, 5-TRIMETHYL-
3	OXEPANE, 2, 2, 3-TRIMETHYL-
4	3-CYCLOHEXEN-1-OL, 1 METHYL-4-(1-METHYLETHYL)-
5	BICYCLO[2. 2. 1]HEPTAN-2-ONE, 1, 7, 7-TRIMETHYL-
6	BICYCLO[2. 2. 1]HEPTAN-2-ONE, 1, 7, 7-TRIMETHYL-
7	2-CYCLOHEXEN-1-OL, 2-METHYL-5-(1-METHYLETHENYL)-, ACETATE, CIS-
8	2-CYCLOHEXEN-1-OL, 2-METHYL-5-(1-METHYLETHENYL)-, ACETATE, CIS-
9	PHENOL, 3, 4-DIMETHYL-
10	BENZENE, 3-BUTENYL-
11	PHENOL, 4-PROPOXY-
12	AZULENE
13	3-CYCLOHEXENE-1-METHANOL, . ALPHA. , . ALPHA. , 4-TRIMETHYL-, (S)-
14	MORPHOLINE, 4-ACETYL-
15	NAPHTHALENE, DECAHYDRO-2-METHYL-
16	PHENOL, 4-(1-METHYLETHYL)-
17	PHENOL, 4-(1-METHYLETHYL)-
18	THIOPHENE, TETRAHYDRO-, 1, 1-DIOXIDE
19	THIOPHENE, TETRAHYDRO-, 1, 1-DIOXIDE
20	5-HEPTEN-2-ONE, 6-METHYL-
21	PENTANE, 3-ETHYL-2, 3-DIMETHYL-
22	BENZENE, (1-METHOXYETHYL)-
23	2-PROPANOL, 1-(2-PROPENYLOXY)-
24	2-PROPANOL, 1-(2-PROPENYLOXY)-
25	CYCLODODECENE
26	CYCLODODECENE
27	2-NONANONE, 9-HYDROXY-
28	1H-INDEN-1-ONE, 2, 3-DIHYDRO-
29	4-PENTENAL, 2-ETHYL-
30	2-PROPANOL, 1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-
31	3-PENTANOL, 2-METHYL-
32	CYCLOHEXANEMETHANOL, 4-HYDROXY-, ALPHA. , . ALPHA. , 4-TRIMETHYL-, MONOHYDRA
33	3-OCTYNE
34	1, 3, 5-TRIOXANE, 2-(1, 1-DIMETHYLETHYL)-
35	OCTANAL, 7-HYDROXY-3, 7-DIMETHYL-
36	CYCLOHEXANEMETHANOL, 4-HYDROXY-, ALPHA. , . ALPHA. , 4-TRIMETHYL-, MONOHYDRA
37	3-OCTANOL, 6-ETHYL-
38	CYCLOHEXANEMETHANETHIOL
39	3(2H)-ISOXAZOLONE, 4, 5-DIMETHYL-
40	1-PENTANOL
41	4H-PYRAN-4-ONE, 2, 6-DIETHYL-3, 5-DIMETHYL-
42	4H-PYRAN-4-ONE, 2, 6-DIETHYL-3, 5-DIMETHYL-
43	ACETANILIDE, N-ETHYL-N-PHENYL-
44	2(3H)-BENZOFURANONE, HEXAHYDRO-4, 4, 7A-TRIMETHYL-
45	PROPANE, 2, 2'-OXYBIS[2-METHYL-
46	1,3-BENZOFURAN

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	586	19.700	477	F	P	
2	RIC	596	4.947	824	P	G	
3	RIC	604	2.441	625	F	P	
4	RIC	615	10.136	543	F	F	
5	RIC	[illegible]	97.[illegible]	768	G	G	
6	RIC	633	15.844				computer error
7	RIC	628	94.920	494	P	P	
8	RIC	633	[illegible]				computer error
9	RIC	649	14.281	696	F	F	toxicity similar to phenol;xylenol;used in disinfec
10	RIC	656	8.283	709	P	F	
11	RIC	667	11.107	706	F	F	
12	RIC	679	68.551	893	G	G	PAH used in cosmetics
13	RIC	689	13.532	486	P	P	
14	RIC	698	0.827	541	P	P	
15	RIC	708	4.615	696	P	F	substituted PAH
16	RIC	717	15.644	618	P	F	
17	RIC	722	10.634				computer error
18	RIC	717	15.887	807			substituted thiophene;solvent-found in coal tar
19	RIC	722	11.034				computer error
20	RIC	735	4.591	744	P	F	
21	RIC	761	3.670	632	F	F	hydrocarbon
22	RIC	768	0.957	316	F	P	
23	RIC	780	1.401	558	P	P	
24	RIC	785	5.306				computer error
25	RIC	780	1.414	686			cyclic hydrocarbon
26	RIC	785	5.427				computer error
27	RIC	794	1.230	433	P	P	
28	RIC	805	3.126	717	F	F	indene base-from coal tar
29	RIC	813	1.060	753	P	F	
30	RIC	817	6.352	647	P	P	
31	RIC	832	30.097	529	P	P	
32	RIC	843	12.552	754	F	F	
33	RIC	864	1.500	542	P	P	
34	RIC	872	5.550	616	F	F	substituted trimer of formaldehyde
35	RIC	892	1.015	462	F	P	
36	RIC	911	3.693	501	F	P	
37	RIC	925	8.703	553	G	P	
38	RIC	943	2.492	339	P	P	
39	RIC	981	100.000	596	G	F	few ions
40	RIC	1027	51.970	420	P	P	
41	RIC	1033	10.401	524	P	P	
42	RIC	1037	4.996				computer error
43	RIC	1049	1.460	732	F	F	probably a mild irritant
44	RIC	1065	1.067	638	P	F	from coal tar
45	RIC	1083	2.029	240	P	P	
46	RIC	1083	2.025	637	P	F	from coal tar;probably toxic;insecticide

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
47	1-OCTENE, 3, 4-DIMETHYL-	47	RIC	1070	1.030	438	P	P	
48	1-BUTANOL, 4-ETHOXY -	48	RIC	1077	0.057	577	P	P	other matches as good
49	AZETIDINE, 1-BROMO-	49	RIC	1130	1.592	391	P	P	
50	BENZOYLCHLORIDE, 2-METHYL-	50	RIC	1159	5.140	661	F	P	2nd choice better
51	PENTANE, 3-BROMO -	51	RIC	1170	1.277	714	G	P	
52	BENZOTHIAZOLE, 2-(METHYLTHIO)-	52	RIC	1179	0.846	809	F	G	rubber accelerator ;fungicide
53	PHENOL, 4-(2, 2, 3, 3-TETRAMETHYLBUTYL)-	53	RIC	1194	50.627	903	G	G	tyloxapol;detergent
54	OXIRANECARBOXYLICACID, 3-PHENYL-, ETHYLESTER, TRANS -	54	RIC	1232	6.916	505	G	P	
55	3, 5-DECADIENE, 2, 2-DIMETHYL-, (Z, Z)-	55	RIC	1200	3.903	522	G	P	
56	BENZENESULFONAMIDE, N-BUTYL-4-METHYL-	56	RIC	1311	4.167	629	F	F	
57	1(2H)-ISOQUINOLINONE	57	RIC	1318	1.047	885	F	G	
58	2, 6-NONADIENOICACID, 9-(3, 3-DIMETHYLOXIRANYL)-3, 7-DIMETHYL-, METHYLEST	58	RIC	1336	1.261	493	P	P	
59	3-CYCLOPENTENE-1-ACETALDEHYDE, 2, 2, 3-TRIMETHYL -	59	RIC	1343	0.575	318	F	P	
60	ANTHRACENE	60	RIC	1363	1.481	841	F	G	PAH
61	D-10 ANTHRACENE(INT. STD.)	61	RIC	1369	2.557	889	F	G	internal std. @ 10 ppb
62	DECANE, 3-BROMO -	62	RIC	1377	1.067	302	F	P	
63	5-AZULENEMETHANOL, 1, 2, 3, 3A, 4, 5, 6, 7-OCTAHYDRO-, ALPHA., ALPHA., 3, 8-TET	63	RIC	1389	4.416	488	F	P	
64	2-NAPHTHALENEMETHANOL, DECAHYDRO-, ALPHA., ALPHA., 4A-TRIMETHYL-8-METHY	64	RIC	1403	3.445	546	P	F	
65	HEXANE, 1, 1, 2, 2, 5, 5, 6, 6-OCTAFLUORO -	65	RIC	1403	2.727	346	P	P	
66	3-HEPTANOL, 6-METHYL -	66	RIC	1417	2.026	422	F	P	
67	9H-CARBAZOLE	67	RIC	1429	1.847	848	G	G	dye intermediate,photographic plates
68	9H-CARBAZOLE	68	RIC	1433	0.682				computer error
69	1, 2-BENZENEDICARBOXYLICACID, DIBUTYLESTER	69	RIC	1446	1.380	735	F	F	phthalate,plasticizer
70	1, 2-BENZENEDICARBOXYLICACID, DIBUTYLESTER	70	RIC	1451	0.601				computer error
71	PHENOL, 4-(1-METHYL-1-PHENYLETHYL)-	71	RIC	1446	1.383	648	P	F	substituted phenol
72	PHENOL, 4-(1-METHYL-1-PHENYLETHYL)-	72	RIC	1451	0.618				computer error
73	1-DECENE, 8-METHYL-	73	RIC	1462	0.684	740	P	F	
74	PENTANE, 3-(2, 2-DICHLORO-3-METHYLCYCLOPROPYL)-	74	RIC	1480	0.407	193	F	P	
75	1, 2-BENZENEDICARBOXYLICACID, BUTYL2-METHYLPROPYLESTER	75	RIC	1532	0.793	811	F	G	phthalate,plasticizer
76	1H-3A, 7-METHANOAZULEN-6-OL, OCTAHYDRO-3, 6, 8, 8-TETRAMETHYL-, [3R-(3. AL'	76	RIC	1605	1.310	482	G	P	
77	PROPANE, 2, 2-DIMETHYL -	77	RIC	1614	0.520	153	P	P	
78	1-PROPANOL, 2-(2-HYDROXYPROPOXY)-	78	RIC	1614	0.821	755	F	F	
79	2, 4(1H, 3H)-PYRIMIDINEDIONE, 6-METHYL-3-PHENYL-	79	RIC	1625	0.385	482	F	P	
80	PENTANOICACID, METHYLESTER	80	RIC	1667	0.435	784	F	F	
81	2-PROPANOL, 1-(2-METHOXY-1-METHYLETHOXY)-	81	RIC	1683	0.435	808	G	G	
82	2-PROPANOL, 1-(1-METHYLPROPOXY)-	82	RIC	1677	3.990	671	G	P	unknown
83	3, 4-HEXANEDIONE, 2, 2, 5-TRIMETHYL-	83	RIC	1724	0.462	793	F	G	
84	1, 3-DIOXOLANE, 2-METHYL-2-PENTYL-	84	RIC	1747	10.454	603	G	F	235 ion impurity,otherwise good match
85	1-NONENE, 4, 6, 8-TRIMETHYL-	85	RIC	1803	0.548	835	G	G	hydrocarbon
86	9-OCTADECENAMIDE, (Z)-	86	RIC	1865	1.701	688	G	F	
87	PROPANE, 2, 2-DIMETHYL-	87	RIC	1875	0.928	328	P	P	
88	PROPANE, 2, 2-DIMETHYL -	88	RIC	1880	0.770				computer error
89	HYDROXYLAMINE, O-DECYL -	89	RIC	1875	0.928	847	P	G	decyl fraction only
90	HYDROXYLAMINE, O-DECYL -	90	RIC	1880	0.770				computer error
91	1-HEPTANOL, 2-PROPYL	91	RIC	1953	1.242	878	G	G	
92	6H-DIBENZO[B, D]PYRAN-1-OL, 3-HEXYL-6A, 7, 8, 10A-TETRAHYDRO-6, 6, 9-TRIMET	92	RIC	1999	1.272	783	G	G	phthalate;plasticizer
93	UNDECANE, 2, 4-DIMETHYL-	93	RIC	2025	0.344	848	G	G	hydrocarbon
94	UNDECANE, 2, 4-DIMETHYL -	94	RIC	2096	0.327	806	G	F	hydrocarbon
95	DECANE, 6-ETHYL-2-METHYL-	95	RIC	2160	0.177	791	G	F	hydrocarbon
96	4-NONENE, 5-NITRO	96	RIC	2197	0.243	558	G	P	

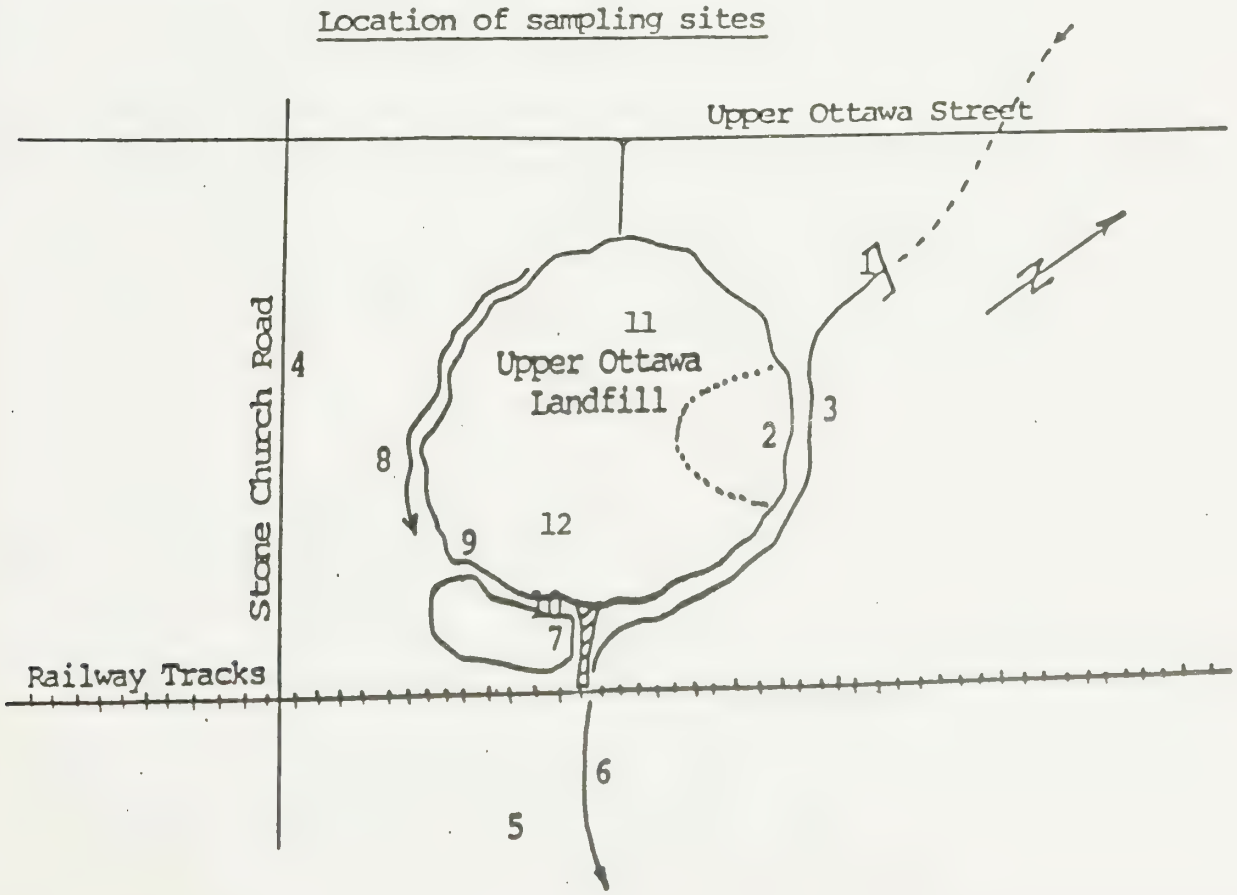
Reference 12-B.

UPPER OTTAWA LANDFILL STUDY
CHEMICAL CHARACTERIZATION
BY
GC/MASS SPECTROMETRY
(BORE HOLES #2 & 4)

SUBMITTED TO: A. KOVEN
DATE : AUGUST 4, 1982
BY : MANN TESTING LABORATORIES LTD.

This text is a continuation of the initial Upper Ottawa Street Land fill Site Study report submitted to Anne Koven on May 14, 1982 by Mann Testing Laboratories Ltd. This report includes analytical data obtained from aqueous samples collected at Bore Holes 2 and 4 (samples 11 and 12 respectively). As in the initial report, a qualitative analysis was performed upon the base-neutral and acid extracts, as well as volatile compound analysis by headspace analysis. The methodology used for the extractables is the same as that used for the first batch of samples submitted. Analysis of the volatiles was performed by headspace analysis instead of the purge and trap method. This was done due to the high concentration of contaminants in the sample. Confirmation and quantitation of contaminants listed require standards and this comprises the second stage of the project.

Location of sampling sites



Summary of Mass Spec Files-Mann Testing Labs

Sample No.	Description	Water			Soil	
		BN	Acid	P&T	BN	Acid
1	Upstream	0650	0655	0736	0857	0844
2	North Leachate	0653	0658	0739	—	—
3	NE Stream	—	—	—	0858	0845
4	Borehole by Firehall	—	—	—	—	—
5	Test Well-Offsite	0672	0676	0738	—	—
6	Downstream	0651	0656	0737	0859	0846
7	Blackhole	0661	0663	0740	0861	0848
8	Ditch-S/W Side	0662	0664	0742	0860	0847
9	Test Well-Onsite	0670	0671	0744	—	—
10	Culvert	1165	1166	0743	—	—
11	Bore Hole #2	1265	1268	1491	—	—
12	Bore Hole #4	1266	1269	1492	—	—

SUMMARY

Bore Hole #2 (Sample #11)

i) Volatiles

The major component was toluene, with C_3-C_6 ketones making up the second major class of compounds detected. Other major components found were THF, benzene, xylenes, C_3-benzenes, phenol, methyl phenol and ethyl benzene.

ii) Base Neutral Extract

The compounds detected in this fraction were many and diverse. Anthracene was found at approximately 50 ppb (compared to the 200 ppb internal standard). There was also the obvious absence of chlorinated organics above the 10 ppb limit of detection.

iii) Acid Extract

The major contaminants found were phenols, substituted benzoic acids and chain alcohols and acids. The resulting chromatography was poor due to the high polarity of these compounds.

Bore Hole #4 (Sample #12)

i) Volatiles

Toluene was again the major component found in this fraction. Ethylbenzene and the xylene isomers comprised the second major class of compounds detected. There were also high levels of dichloroethane and acetic acid. Phenol, ethyl phenol and napthalene were also present.

ii) Base Neutral Extract

This fraction had higher levels of contaminants than Bore Hole #2. There were high levels of chain hydrocarbons, aromatic hydrocarbons, alcohols and phenols. There were also some nitrogen and sulfur based compounds present. PAH's were detected at relatively high concentrations, that is, above 200 ppb, which is the concentration of the spiked D_{10}-anthracene which could not be detected due to high levels of contaminants.

iii) Acid Extract

Chain acids, alcohols, phenols, and benzoic acid derivatives were detected in this extract. Ketones and benzothiazolone were also found to be present.

PCB

Sample 11 Bore Hole #2

The sample submitted to Novalab contained 0.15 ug/l of Aroclor 1254 with "a very small amount of other chlorinated organics."

Sample 12 Bore Hole #4

This sample contained high PCB levels in the range of 48 ug/l of Aroclor 1254 with "contaminating materials in concentrations greater than that of the PCB."

SUMMARY OF COMPOUNDS DETECTED

Sample	Aroclor 1254 PCB (ug/l)	Base Neutral	Acid	Headspace
11. Bore Hole #2	0.15	PAH	Acids	Aromatics*
		Phthalates	Phenols	THF
		Sulfur	Alcohols	Ketones
		H/C		
12. Bore Hole #4	48	PAH	Acids	Aromatics*
		Phthalates	Phenols	THF
		Phenols	Alcohols	Napthalene
		Sulfur		H/C
		H/C		

* Aromatics include substituted benzenes, phenols

NOVALAB LTEE LTD . 9420 COTE DE LIESSE, LACHINE, QUE.H8T 1A1 . TEL.:(514)636-6219,631-1838
TELEX:05-822787(LYNJON MTL)

TO: Mann Testing Laboratories Limited
80 Galaxy Blvd., Unit 10
Rexdale, Ontario
M9W 4Y8

Attention: Mr. John Martin.

DATE: June 14, 1982.

CLIENT ORDER #: -

REPORT #: NL-564.

RE: Analysis of Water Samples for PCB.

Sir,

Two water samples were analysed for PCB by Environment Canada methods. Results are shown in the Table.

TABLE - Concentration of PCB in Waters

Sample #	Aroclor 1254(μg/L)
BH #2	0.15
BH #4	48

Bore hole #2 contained a very small amount of other chlorinated organics. Bore hole #4 contained contaminating materials in concentrations greater than that of the PCB.

Yours sincerely,

NOVALAB LIMITED

J. D. Fenwick

J.D. Fenwick, Ph.D., P.Chem.

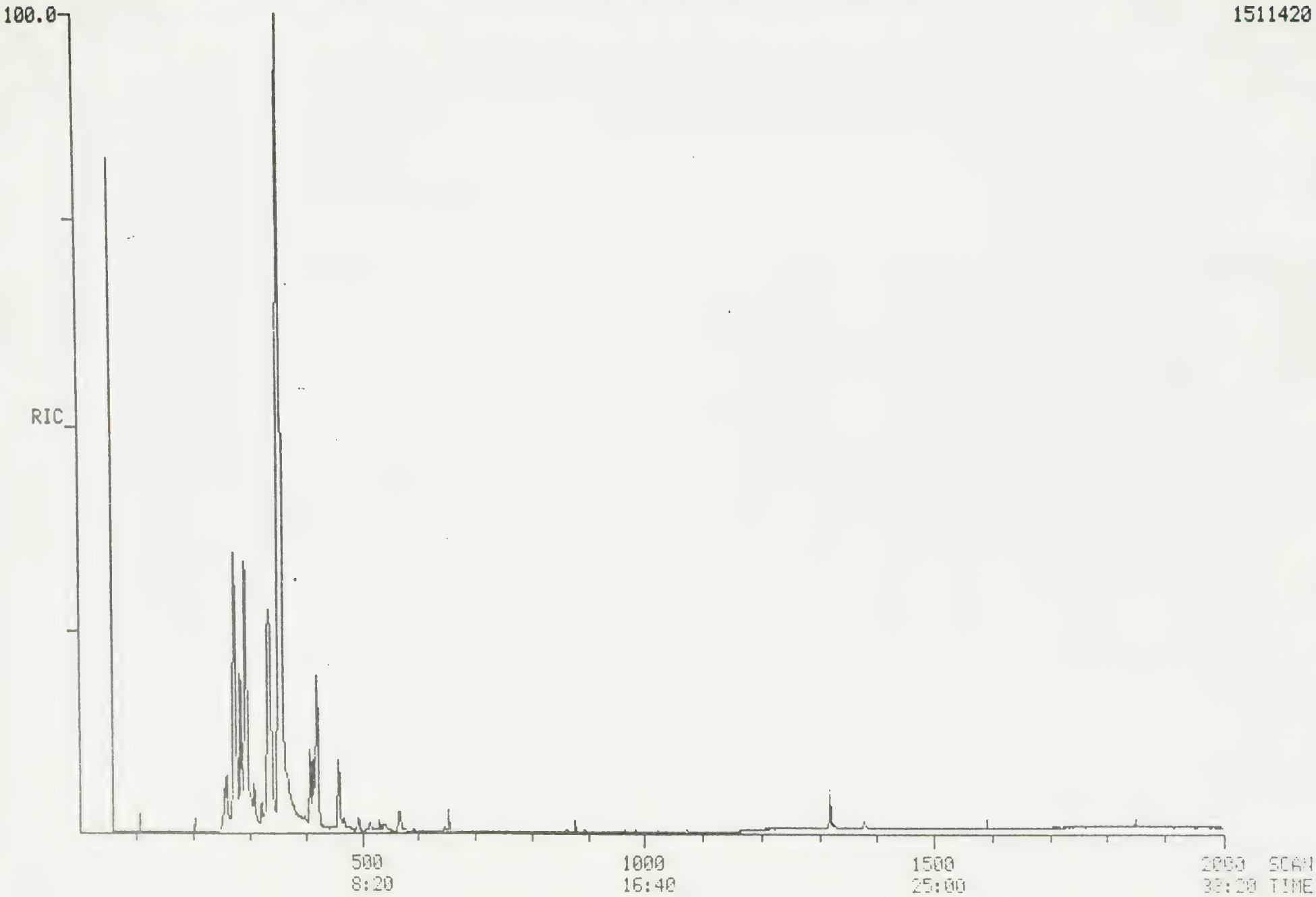
JDF:sm

All reports are the confidential property of clients. Publication of statements, conclusions or extracts regarding our reports is not permitted without our written approval. Any liability attached thereto is limited to the fee charged. Unless otherwise arranged samples will be discarded 90 days after receipt.

RIC
06/25/82 14:57:00
SAMPLE: BH2 50ML HEADSPACE
RANGE: G 1,2000 LABEL: N 0, 4.0 QUAN: A 0, 1.0 BASE: U 20, 3

DATA: 1491 #1934
CALI: 1488 #1

SCANS 1 TO 2000



QUANTITATION REPORT FILE: 1491

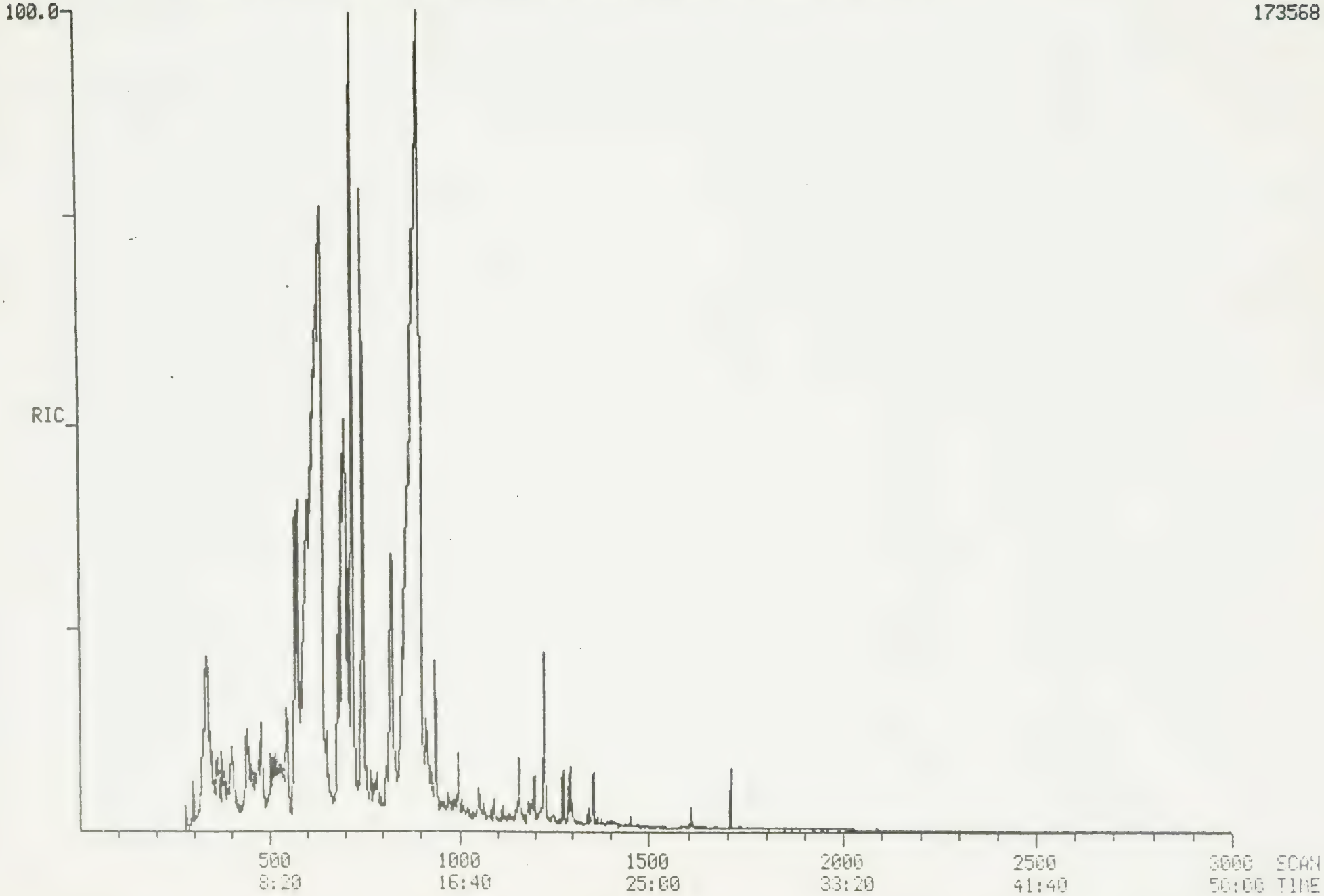
DATA: 1491.T1
06/25/82 14:57:00
SAMPLE: BH2 50ML HEADSPACE
SUBMITTED BY: A.KOVEN ANALYST: SH

AMOUNT=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	ETHANE,1,1,2-TRICHLORO-1,2,2-TRIFLUORO-
2	PROPANENITRILE,2-HYDROXY-
3	2-PROPANONE
4	FURAN,TETRAHYDRO-
5	2-BUTANONE
6	BENZENE
7	PENTANAL
8	ETHANOL,2-METHOXY-,ACETATE
9	2-PICOLINE,6-NITRO-
10	SILANE,TETRAMETHYL-
11	BENZENE,ETHYL-
12	BENZENE,1,4-DIMETHYL-
13	BENZENE,1,2-DIMETHYL-
14	BENZENE,1,2-DIMETHYL-
15	2-PENTANOL,4-METHYL-
16	BENZENE,1-ETHYL-2-METHYL-
17	BENZENE,1,2,3-TRIMETHYL-
18	BENZENE,1-ETHYL-2-METHYL-
19	BENZENE,1,2,4-TRIMETHYL-
20	BENZENE,1,2,3-TRIMETHYL-
21	1-PENTANOL,2-ETHYL-4-METHYL-
22	BENZALDEHYDE
23	PENTANOICACID,4,4-DIMETHYL-3-METHYLENE-,ETHYLESTER
24	FURAN,TETRAHYDRO-2,5-DIMETHYL-,TRANS-(\)-
25	CYCLOHEXANOL,5-METHYL-2-(1-METHYLETHYL)-,(1.ALPHA.,2.ALPHA.,5.ALPHA.
26	3-CYCLOHEXENE-1-METHANOL,.ALPHA.,.ALPHA.,4-TRIMETHYL-,ACETATE
27	PHENOL
28	PHENOL,3-METHYL-

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	255	2.819	733	P	G	freon 113 (contamination ?)
2	RIC	259	2.867	905	P	G	or formic acid, ethyl ester
3	RIC	273	26.565	929	G	G	Acetone (internal ?)
4	RIC	284	9.651	942	G	G	THF
5	RIC	293	25.787	798	G	G	butanone
6	RIC	309	1.776	578	P	F	benzene
7	RIC	323	0.876	957	G	G	pentanal
8	RIC	337	29.838		G	G	4 methyl 2 pentanone
9	RIC	358	100.000		G	G	toluene (saturated)
10	RIC	399	0.251	766	G	F	tetramethyl silane (system peak)
11	RIC	410	5.057	956	G	G	ethyl benzene
12	RIC	416	4.139	949	G	G	xylene isomer
13	RIC	422	10.395	943	G	G	xylene isomer
14	RIC	460	5.112	955	G	G	xylene isomer
15	RIC	469	0.993	934	F	G	4 methyl-2- pentanol
16	RIC	495	0.931	900	G	G	C_3-benzene isomer
17	RIC	516	0.757	919	G	G	C_3-benzene isomer
18	RIC	541	0.703	824	F	G	C_3-benzene isomer
19	RIC	568	1.763	895	G	G	C_3-benzene isomer
20	RIC	647	0.318	898	G	G	C_3-benzene isomer
21	RIC	862	0.169	877	G	G	C_3-pentanol
22	RIC	896	0.139	916	G	G	benzaldehyde
23	RIC	923	0.067	635	P	P	mixture of unknowns
24	RIC	985	0.061	868	G	F	dimethyl THF
25	RIC	1022	0.091	818	G	G	isomer
26	RIC	1073	0.133	508	P	F	mixture
27	RIC	1319	2.632	950	G	G	phenol
28	RIC	1378	0.443	935	G	G	methyl phenol isomer

RIC DATA: 1265 #1 SCANS 1 TO 3000
05/04/82 8:22:00 CALI: 1240 #1
SAMPLE: W#11(BH2) BN EXT 1/5000UL 200PPB D10 (20NG D10 INJ@100%)
RANGE: G 1,3000 LABEL: N 0, 4.0 QUAN: A 0, 1.0 BASE: U 20, 3



QUANTITATION REPORT FILE: 1265

DATA: 1265.TI
05/04/82 8:22:00
SAMPLE: W#11(DH2) BN EXT 1/5000UL 200PPB D10 (20NG D10 INJ@100%)
SUBMITTED BY: A.KOVEN ANALYST: SH

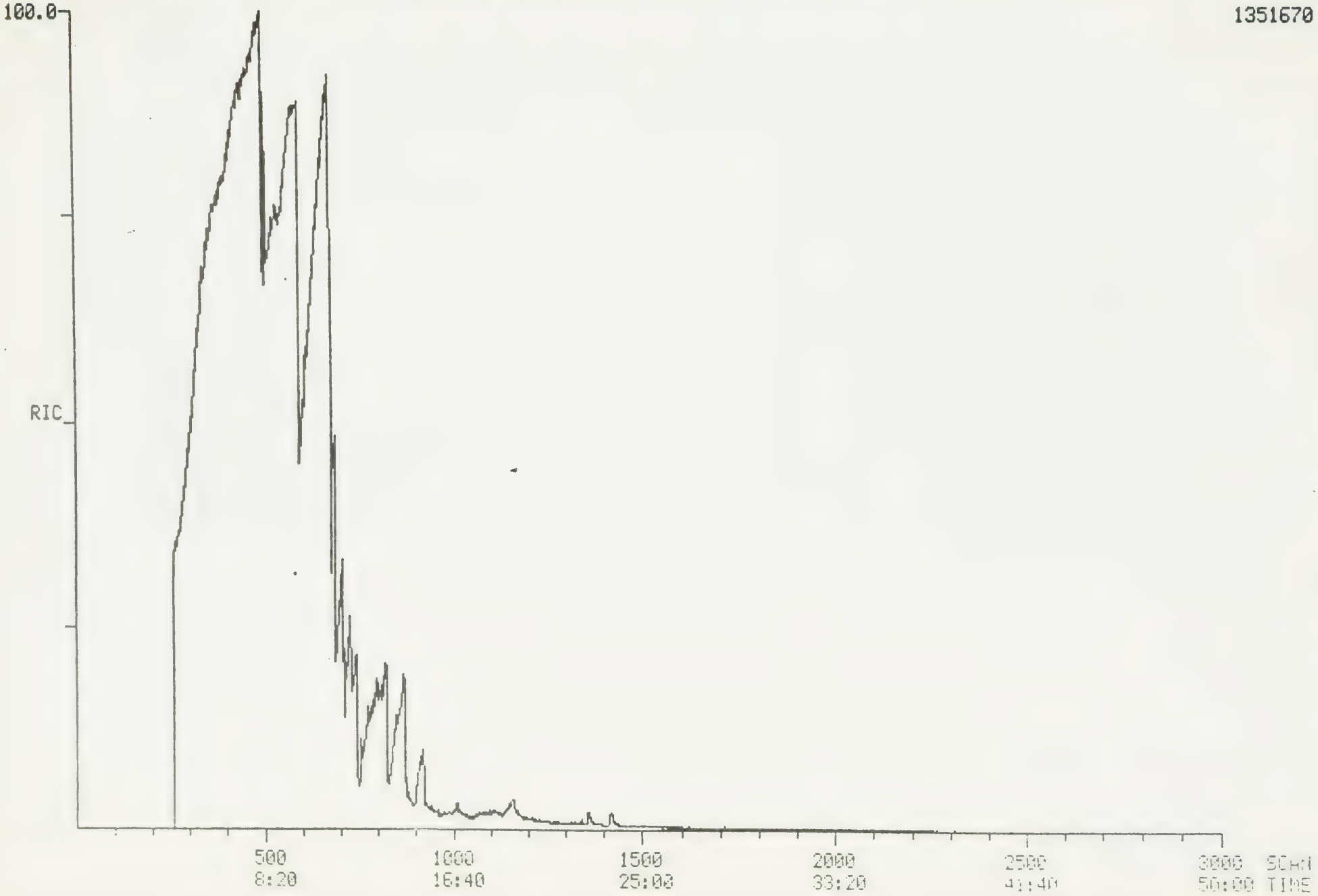
AMOUNT=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME	NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	2-BUTANOL,(R)-	1	RIC	333	24.771	528	G	F	solvent
2	PROPANE,2,2-DIMETHYL-	2	RIC	361	3.055	771	P	F	solvent
3	CYCLOHEXANE,METHYL-	3	RIC	367	0.999	403	P	P	poor match
4	BENZENEMETHANOL	4	RIC	373	3.256	711	P	G	solvent
5	ACETYLCHLORIDE,CHLORO-	5	RIC	380	0.876	538	P	P	poor match
6	CYCLOHEPTATRIENYLIUM,IODIDE	6	RIC	383	0.648	408	P	P	poor match
7	2-PYRROLIDINONE,1-METHYL-	7	RIC	400	5.452	841	G	G	poor match
8	PHENOL,3-METHYL-	8	RIC	441	6.806	883	G	G	
9	BENZENEMETHANOL	9	RIC	452	1.880	606	P	F	
10	CARBONOCHLORIDICACID,2-CHLORO-1-METHYLETHYLESTER	10	RIC	452	1.880	571	P	P	phenol type
11	2-CYCLOHEXEN-1-ONE,3,5,5-TRIMETHYL-	11	RIC	480	6.623	547	G	P	C_3-cyclohexenone (peak not resolved)
12	BICYCLO[2.2.1]HEPTAN-2-ONE,1,3,3-TRIMETHYL-	12	RIC	506	1.675	672	P	F	
13	BENZENAMINE,N-METHYL-N-NITROSO-	13	RIC	516	2.234	575	P	F	
14	CYCLOHEXANOL,5-METHYL-2-(1-METHYLETHYL)-,(1.ALPHA.,2.ALPHA.,5.BETA.)	14	RIC	547	9.698	853	G	G	
15	3-CYCLOHEXENE-1-METHANOL,.ALPHA.,.ALPHA.,4-TRIMETHYL-,(S)-	15	RIC	570	21.704	795	G	G	
16	ETHANOL,1-(2-BUTOXYETHOXY)-	16	RIC	578	13.669	869	F	G	
17	BICYCLO[3.1.1]HEPT-3-EN-2-ONE,4,6,6-TRIMETHYL-	17	RIC	593	2.707	748	P	G	
18	THIOPHENE,TETRAHYDRO-,1,1-DIOXIDE	18	RIC	602	5.272	831	P	G	
19	PIPERIDINONE	19	RIC	644	73.663	927	G	G	
20	2H-AZEPIN-2-ONE,HEXAHYDRO-	20	RIC	687	9.862	699	F	F	
21	1-PROPANOL,2-(2-METHOXY-1-METHYLETHOXY)-	21	RIC	696	21.237	838	P	G	
22	2-PROPANOL,1-[2-(2-METHOXY-1-METHYLETHOXY)-1-METHYLETHOXY]-	22	RIC	704	17.323	876	P	G	
23	1,2-CYCLOHEXANEDIOL,1-METHYL-4-(1-METHYLETHYL)-	23	RIC	712	5.585	709	P	G	
24	CYCLOHEXANEMETHANOL,4-HYDROXY-.ALPHA.,.ALPHA.,4-TRIMETHYL-,MONOHYDRA	24	RIC	724	49.696	803	G	G	
25	CYCLOHEXANEMETHANOL,4-HYDROXY-.ALPHA.,.ALPHA.,4-TRIMETHYL-,MONOHYDRA	25	RIC	743	5.460	778	P	G	
26	PYRIDINE,3-(1-METHYL-2-PYRROLIDINYL)-,(S)-	26	RIC	751	28.544	829	G	G	
27	2(3H)-FURANONE,DIHYDRO-5-PROPYL-	27	RIC	768	1.702	682	F	G	
28	7-OXABICYCLO[4.1.0]HEPTANE,2-METHYL-	28	RIC	777	0.692	524	P	P	poor match
29	3-OCTANOL,6-ETHYL-	29	RIC	786	3.555	563	P	F	
30	MORPHOLINE,3,5-DIMETHYL-4-NITROSO-	30	RIC	827	29.446	737	G	F	morpholine class
31	ETHANOL,2-[2-(2-BUTOXYETHOXY)ETHOXY]-	31	RIC	881	3.653	750	P	F	
32	2-OXAZOLIDINONE,3-(2-HYDROXYPROPYL)-5-METHYL-	32	RIC	903	100.000	852	G	G	
33	2-HEPTANOL,3-METHYL-	33	RIC	916	3.871	495	F	P	poor match
34	ETHENE,(2-ETHOXY-1-METHOXYETHOXY)-	34	RIC	940	6.478	752	G	G	solvent
35	ETHANOL,2-[2-(2-ETHOXYETHOXY)ETHOXY]-	35	RIC	972	1.548	772	P	G	solvent
36	1,2-BENZENEDICARBOXYLICACID,DIETHYLESTER	36	RIC	1000	3.605	879	G	G	phthalate
37	OXIRANE,(ETHOXYMETHYL)-	37	RIC	1008	0.479	605	P	F	1-(2-methylpropoxy)-2-propanol
38	1-NONYNE	38	RIC	1053	2.714	533	F	F	H/C
39	23535BC BLOOD	39	RIC	1066	0.728	796	P	G	biological matrix?
40	PROPANOICACID,2-METHYL-,1-METHYLBUTYLESTER	40	RIC	1093	0.864	584	P	P	poor match
41	2,3,5-TRIOXABICYCLO[2.1.0]PENTANE,1,4-BIS(PHENYLMETHYL)-	41	RIC	1116	0.512	409	P	P	phenyl based compound
42	ANTHRACENE	42	RIC	1155	0.712	879	P	G	phenanthrene (PAH)
43	D-10 ANTHRACENE(INT. STD.)	43	RIC	1160	2.743	933	G	G	internal std. @ 200 ppb
44	3-HEXANOL,4-METHYL-	44	RIC	1184	1.541	518	F	P	alcohol
45	2-NAPHTHALENEMETHANOL,DECAHYDRO-.ALPHA.,.ALPHA.,4A-TRIMETHYL-8-METHY	45	RIC	1192	1.523	498	F	F	
46	3-UNDECENE,(Z)-	46	RIC	1201	2.216	627	F	F	tetramethylcyclopentadione
47	1H-PURINE-2,6-DIONE,3,7-DIHYDRO-1,3,7-TRIMETHYL-	47	RIC	1227	8.746	887	G	G	
48	2-UNDECENE,(Z)-	48	RIC	1277	2.755	557	G	P	poor match
49	5-UNDECENE,(E)-	49	RIC	1290	1.495	556	P	P	poor match
50	FURAN,2,5-DIHYDRO-	50	RIC	1296	2.490	548	F	P	poor match
51	BUTANOICACID,2-[(TRIFLUOROACETYL)AMINO]-,BUTYLESTER	51	RIC	1302	1.446	540	P	F	
52	METHANAMINE,N,N-DIMETHYL-	52	RIC	1344	0.576	599	F	P	dimethyl silane?
53	SULFUR,MOL.(S8)	53	RIC	1357	3.330	641	G	F	sulfur compound
54	2,2'-BIOXIRANE	54	RIC	1525	0.093	670	F	P	poor match
55	4-DECENE,2,2-DIMETHYL-,(Z)-	55	RIC	1603	0.187	407	F	F	H/C
56	2-CYCLOPENTENE-1-THIONE,3,4,4-TRIMETHYL-	56	RIC	1610	0.052	375	G	P	poor match
57	1,2-BENZENEDICARBOXYLICACID,DIISOOCTYLESTER	57	RIC	1711	2.204	816	G	G	phthalate

RIC
05/04/82 12:51;00
SAMPLE: W#11 BH2 ACID EXT 200PPB D10 0.1/500UL
RANGE: G 1,3000 LABEL: N 0, 4.0 QUAN: A 0, 1.0 BASE: U 20, 3

DATA: 1268 #1
CALI: 1240 #1

SCANS 1 TO 3000



QUANTITATION REPORT FILE: 1268

DATA: 1268.TI
05/04/82 12:51:00
SAMPLE: W#11 BH2 ACID EXT 200PPB D10 0.1/500UL
SUBMITTED BY: A.KOVEN ANALYST: SH

AMOUNT=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

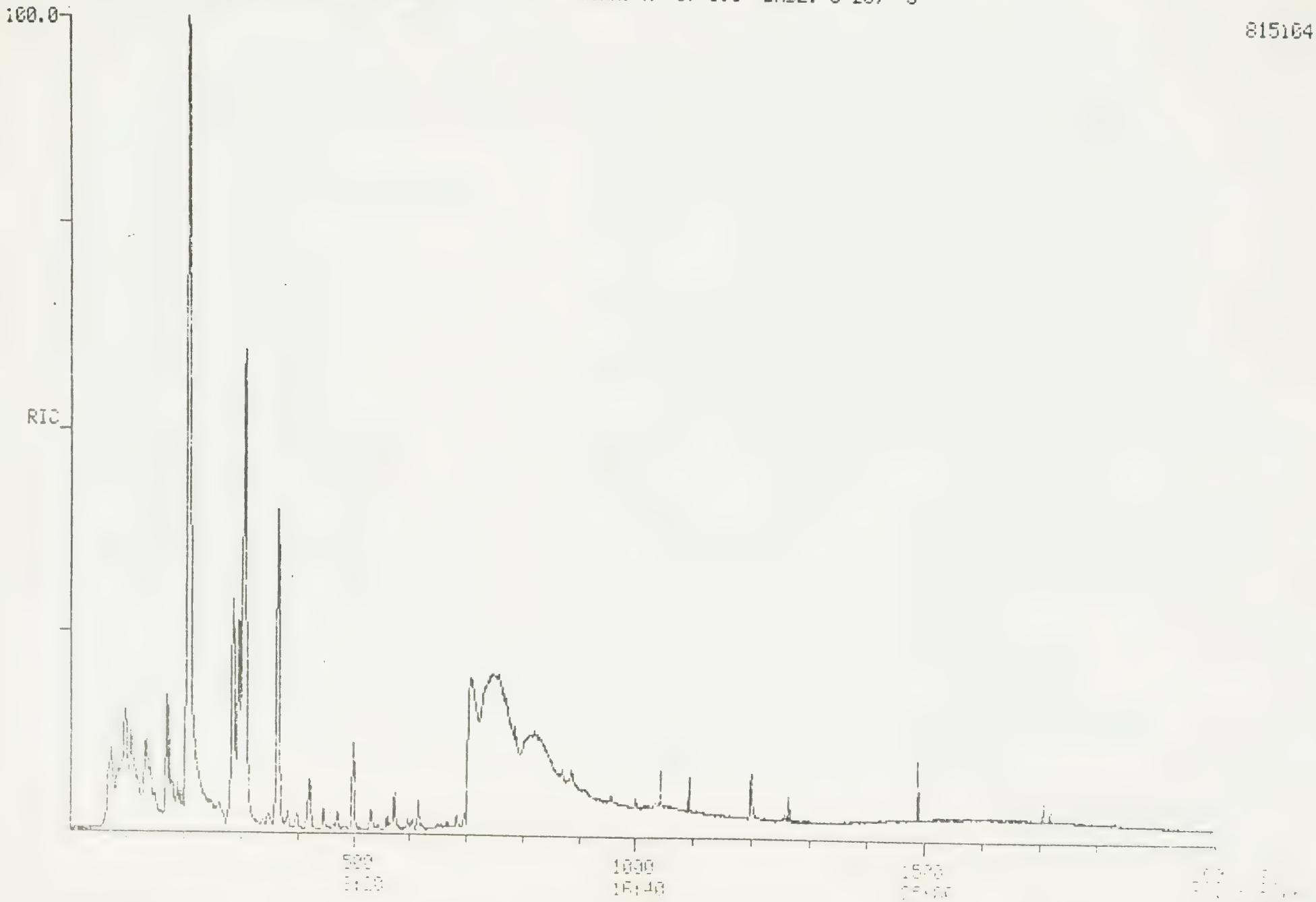
NO	NAME
1	1,2,4-BUTANETRIOL
2	PROPANOICACID,3-(2-PROPYNYLOXY)-
3	PHENOL
4	BUTANOICACID,2-METHYL-,2-METHYLPROPYLESTER
5	PENTANOICACID,PROPYLESTER
6	PHENOL,4-METHYL-
7	HEXANOICACID
8	HEPTANOICACID
9	CYCLOHEXANECARBOXYLICACID
10	OCTANOICACID
11	OCTANOICACID
12	BENZOICACID
13	1,2-BENZENEDICARBOXYLICACID
14	HEXANAL,5-METHYL-
15	SILANAMINE,N-SILYL-
16	2-NONANONE,9-[(TETRAHYDRO-2H-PYRAN-2-YL)OXY]-
17	PENTANOICACID,4-METHYL-
18	PENTANOICACID,4-METHYL-
19	BENZENEACETICACID
20	S-INDACENE-1,7-DIONE,2,3,5,6-TETRAHYDRO-3,3,5,5-TETRAMETHYL-
21	BENZENEPROPANOICACID
22	2-OXAZOLIDINONE,3-(2-HYDROXYPROPYL)-5-METHYL-
23	BENZENEBUTANOICACID,2,5-DIMETHYL-
24	CYCLOHEXANE,NITRO-
25	NONANEDIOICACID
26	CYCLOHEXANECARBOXYLICACID,4-(1,5-DIMETHYL-3-OXOHEXYL)-,METHYLESTER,
27	PHENOL,2,2'-METHYLENEBIS-
28	PHENOL,4,4'-METHYLENEBIS-

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	338	2.276	559	F	P	pentanoic acid
2	RIC	498	49.359	667	G	P	hexanoic acid
3	RIC	506	9.791	924	G	G	phenol
4	RIC	532	4.996	584	P	P	C_7 or C_8 acid
5	RIC	592	69.619	554	G	P	C_7 or C_8 acid
6	RIC	599	1.341	872	P	G	C_1-phenol
7	RIC	675	100.000	622	G	P	C_7 or C_8 acid
8	RIC	687	26.480	832	F	G	C_7 or C_8 acid
9	RIC	708	30.042	734	P	G	cyclohexane acid
10	RIC	714	4.482	901	F	G	C_8-acid
11	RIC	728	23.786	878	F	G	C_7 or C_8 acid
12	RIC	745	18.459	857	F	G	benzoic acid
13	RIC	756	1.589	782	P	G	benzene dioic acid
14	RIC	773	3.051	544	P	F	poor resolution
15	RIC	784	0.346	316	P	P	poor resolution
16	RIC	789	1.324	537	P	P	poor resolution
17	RIC	797	0.548		P	-	poor resolution
18	RIC	799	1.233	572	P	P	acid
19	RIC	822	20.236	881	P	G	C_2-benzoic acid
20	RIC	851	10.301	562	F	P	C_3-benzoic acid
21	RIC	870	19.670	917	P	G	C_3-benzoic acid
22	RIC	921	12.324	887	G	G	$C_7H_{13}O_3N$
23	RIC	1012	1.140	675	F	G	C_6-benzoic acid
24	RIC	1018	0.549	546	P	F	C_6-benzoic acid
25	RIC	1162	2.094	710	F	G	C_9-dioic acid
26	RIC	1343	0.340	624	F	G	cyclohexane dioic acid der.
27	RIC	1362	1.710	780	G	G	2,2' methylene bis phenol
28	RIC	1422	2.141	669	G	G	4,4' methylene bis phenol

RIC
06/25/82 15:55:00
SAMPLE: HEADSPACE BH4 (12)
RANGE: G 1,2000 LABEL: N 0, 4.0 QUAN: A 0, 1.0 BASE: U 20, 3

DATA: 1452 #1832
CALI: 1488 #1

SCANS 1 TO 2000



QUANTITATION REPORT FILE: 1492

DATA: 1492.T1
06/25/82 15:55:00
SAMPLE: HEADSPACE BH4 (12)
SUBMITTED BY: A.KOVEN ANALYST: SH

AMOUNT=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

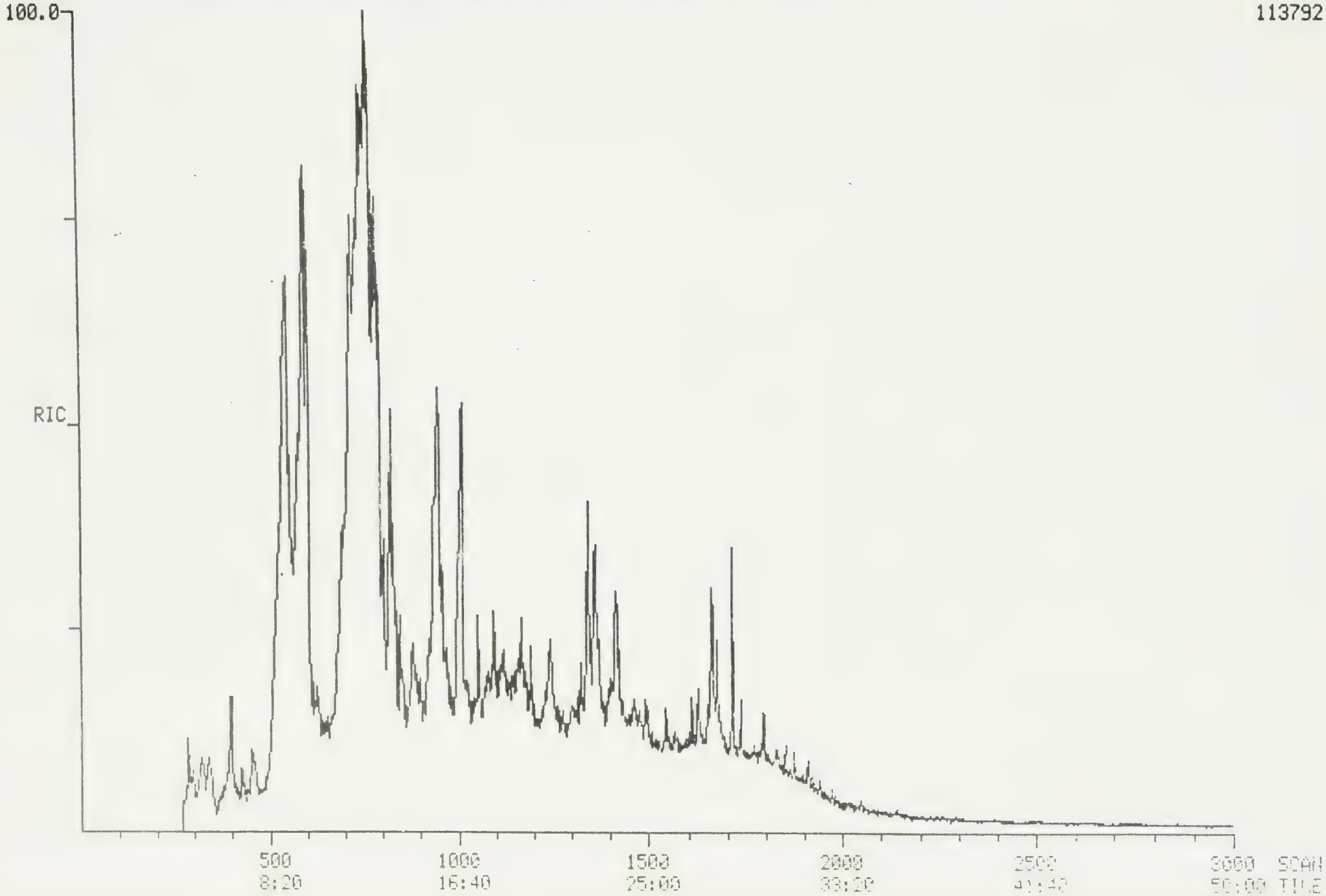
NO	NAME
1	FURAN, TETRAHYDRO-
2	CYCLOPENTANOL, 2-METHYL-, ACETATE, TRANS-
3	2-BUTANONE, 3-METHYL-
4	CYCLOTETRASILOXANE, OCTAMETHYL-
5	ETHENE, 1,2-DICHLORO-, (Z)-
6	BUTANE
7	2-PENTANONE, 4-METHYL-
8	METHANE, TRICHLORO-
9	BICYCLO[3.1.1]HEPT-2-ENE, 3,6,6-TRIMETHYL-
10	2-PICOLINE, 6-NITRO-
11	2-BUTENAL, 2-METHYL-
12	BENZENE, ETHYL-
13	BENZENE, 1,4-DIMETHYL-
14	BENZENE, 1,4-DIMETHYL-
15	BENZENE, (1-METHYLETHYL)-
16	BENZENE, 1,2-DIMETHYL-
17	BICYCLO[2.2.1]HEPT-2-ENE, 1,7,7-TRIMETHYL-
18	BENZENE, PROPYL-
19	BENZENE, 1-ETHYL-2-METHYL-
20	BENZENE, 1,2,4-TRIMETHYL-
21	1,3,5,7-CYCLOOCTATETRAENE
22	BENZENE, 1-ETHYL-2-METHYL-
23	BENZENE, 1-METHYL-4-(1-METHYLETHYL)-
24	BENZENE, 1,2,4-TRIMETHYL-
25	BENZENE, 1-METHYL-4-PROPYL-
26	BENZENE, BUTYL-
27	BENZENE, 1-METHYL-3-(1-METHYLETHYL)-
28	BENZENE, 1-ETHYL-2-METHYL-
29	BENZENE, 1-ETHYL-2,3-DIMETHYL-
30	BENZENE, 2-ETHYL-1,3-DIMETHYL-
31	BENZENE, 2-ETHYL-1,4-DIMETHYL-
32	CYCLOHEXANONE, 3,3,5-TRIMETHYL-
33	ETHANE, 2-CHLORO-1,1,2-TRIFLUORO-1-METHOXY-
34	BENZENE, (1,1-DIMETHYLPROPYL)-
35	BENZENE, 1-ETHYL-2,3-DIMETHYL-
36	BENZENE, 1,2,3,5-TETRAMETHYL-
37	BENZENE, 4-ETHYL-1,2-DIMETHYL-
38	PROPANOICACID, 2-(AMINOOXY)-
39	OCTANOICACID, 7-OXO-, METHYLESTER
40	BENZENE, 1,2,3,4-TETRAMETHYL-
41	PENTANOICACID, 4,4-DIMETHYL-3-METHYLENE-, ETHYLESTER
42	ACETICACID, PHENYLESTER
43	FORMICACID, METHYLESTER
44	2(3H)-FURANONE, DIHYDRO-5-METHYL-
45	1-PROPANAMINE, 3-METHOXY-
46	OXETANE, 2-ETHYL-3-METHYL-
47	AZULENE
48	PHENOL
49	PHENOL, 3-METHYL-

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	107	7.878	842	G	F	THF
2	RIC	119	1.184	668	P	F	
3	RIC	134	8.059	652	P	F	C_5-ketone & methylene chloride
4	RIC	149	1.288	740	P	F	system background silicones
5	RIC	170	11.252	974	G	G	dichloroethane
6	RIC	176	2.306	897	F	G	butane
7	RIC	180	2.529	663	P	P	C_5-ketone & unknown
8	RIC	190	1.804	778	F	F	chloroform
9	RIC	197	0.854	909	F	G	
10	RIC	208	100.000		G	G	toluene (saturated)
11	RIC	262	2.029	841	F	G	C_5-aldehyde
12	RIC	286	17.500	951	G	G	C_2-benzene isomer
13	RIC	296	20.847	946	G	G	C_2-benzene isomer
14	RIC	307	51.474	937	G	G	C_2-benzene isomer
15	RIC	349	0.932	739	G	F	C_3 benzene isomer
16	RIC	366	33.153	940	G	G	C_2 benzene isomer
17	RIC	383	1.170	863	G	G	or C_4-cyclohexane isomer
18	RIC	399	1.446	962	G	G	C_3 benzene isomer
19	RIC	422	5.490	890	G	G	C_3 benzene isomer
20	RIC	448	1.931	910	G	G	C_3 benzene
21	RIC	465	0.224	588	F	F	cyclo-octatetraene & unknown
22	RIC	473	1.332	921	G	G	C3 benzene isomer
23	RIC	486	0.378	870	G	G	C_4 benzene isomer
24	RIC	500	7.630	902	G	G	C_3 benzene isomer
25	RIC	533	2.341	928	G	G	C_4 benzene isomer
26	RIC	546	0.467	895	G	G	C_4 benzene isomer
27	RIC	562	0.928	917	G	G	C_4 benzene isomer
28	RIC	574	3.585	900	G	G	C_3 benzene isomer
29	RIC	598	0.742	926	G	G	C_4 benzene isomer
30	RIC	606	0.736	921	G	G	C_4 benzene isomer
31	RIC	617	2.075	818	F	G	C_4 benzene & unknown
32	RIC	623	0.428	943	G	G	C_3-cyclohexanone
33	RIC	652	0.486		P	P	mixture of unknowns
34	RIC	656	0.198	612	F	F	C_5-benzene isomer
35	RIC	668	0.392	872	G	G	C_4-benzene isomer
36	RIC	685	0.762	926	G	G	C_4-benzene isomer
37	RIC	698	0.732	926	G	G	C_4-benzene isomer
38	RIC	706	26.362		F	G	acetic acid
39	RIC	749	4.440		F	G	C_3-C_5 acid
40	RIC	757	7.058	922	G	G	C_4 benzene isomer
41	RIC	815	3.834		P	P	trimethyl cyclohexanol
42	RIC	820	3.479		P	P	chain acid
43	RIC	826	1.343	794	F	G	formic acid methyl ester
44	RIC	871	0.524	831	P	F	
45	RIC	887	1.164	665	F	F	mixture
46	RIC	959	0.394	572	P	P	mixture of THF derv. & alcohol
47	RIC	1001	0.537	941	G	G	napthalene
48	RIC	1201	3.100	948	G	G	phenol
49	RIC	1260	0.960	898	G	G	mehyl phenol

RIC
05/04/82 13:49:00
SAMPLE: W#12 BH4 ACID EXT 200PPB-D10 0.5/5000UL
RANGE: G 1,3000 LABEL: N 0, 4.0 QUAN: A 0, 1.0 BASE: U 20, 3

DATA: 1269 #1
CALI: 1240 #1

SCANS 1 TO 3000



QUANTITATION REPORT FILE: 1269

DATA: 1269.TI
05/04/82 13:49:00
SAMPLE: W#12 BH4 ACID EXT 200PPB-D10 0.5/5000UL
SUBMITTED BY: A.KOVEN ANALYST: SH

AMOUNT=AREA(HGHT) * REF AMNT/(REF.AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

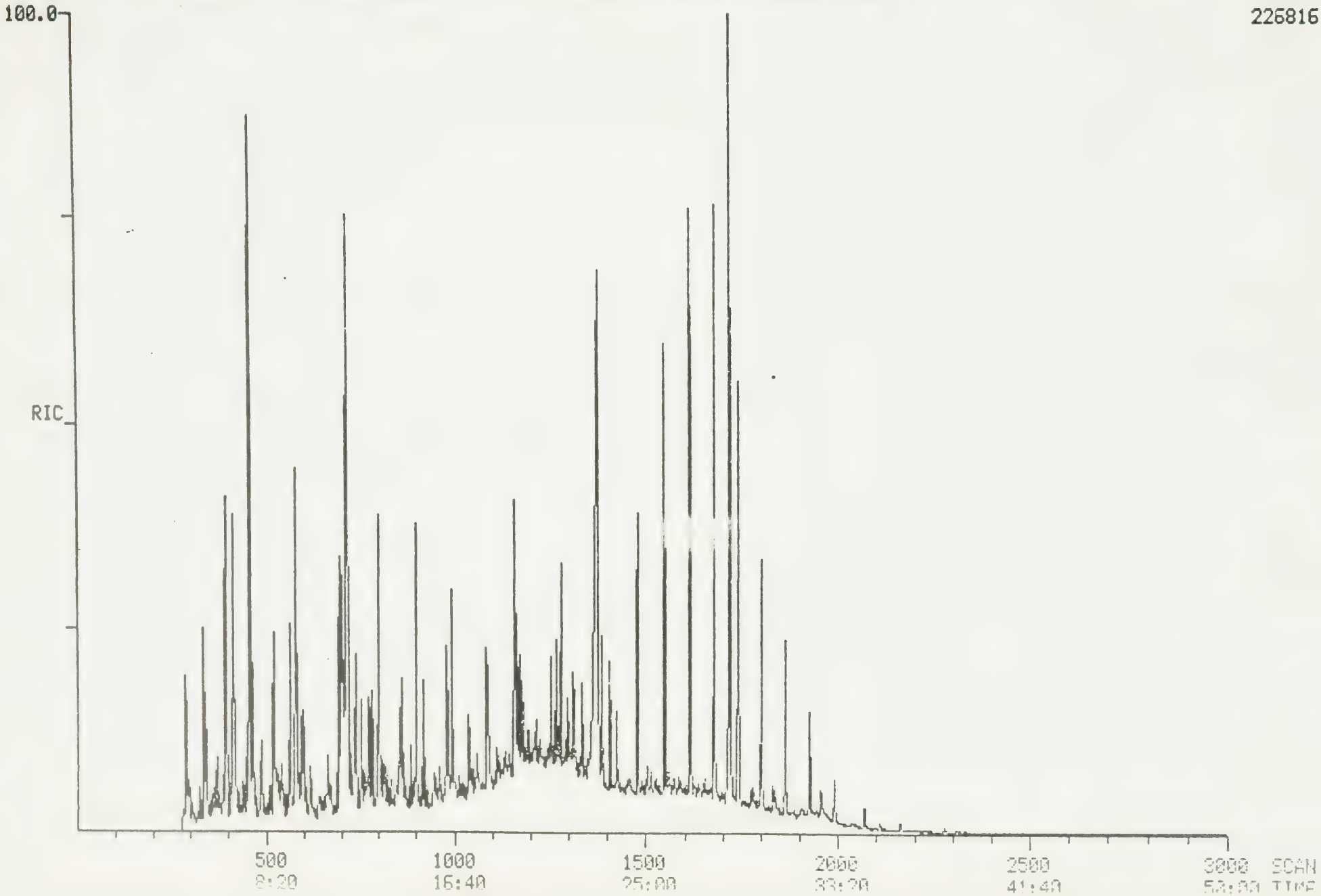
NO	NAME
1	METHANAMINE, N-METHYL-N-NITROSO-
2	FORMICACID, 1-METHYLPROPYLESTER
3	HEXANOICACID
4	PHENOL, 2-METHYL-
5	PHENOL, 3-METHYL-
6	THIIRANE
7	OCTANOICACID
8	2-PROPENOICACID, 2-METHYL-, 1-METHYLPROPYLESTER
9	3-HEPTANOL, 6-METHYL-
10	1,2-BENZENEDICARBOXYLICACID
11	1-PENTANOL, 3-METHYL-2-PROPYL-
12	BUTANOICACID, 3,3-DIMETHYL-, METHYLESTER
13	HEPTANOICACID
14	1-PROPANOL, 2,2-DIMETHYL-
15	PROPANOICACID, 2-METHYL-
16	1,3-DIOXANE-5-METHANOL, 4,5-DIMETHYL-
17	3-HEPTANOL, 3,6-DIMETHYL-
18	1,6-HEPTADIENE, 2,5,5-TRIMETHYL-
19	ETHANOL, 2-(2-BUTOXYETHOXY)-
20	BENZENEACETICACID, ETHYLESTER
21	BENZENE, (1-NITROPROPYL)-
22	BENZENEBUTANOICACID
23	ETHANONE, 1-(1-CYCLOHEXEN-1-YL)-
24	PROPANE, 2-METHYL-1-PROPOXY-
25	BENZENEBUTANOICACID, 2,5-DIMETHYL-
26	1H-1,2,4-TRIAZOLE, 1-BUTYL-
27	2(3H)-BENZOTHIAZOLONE
28	1,5-HEXADIENE-3,4-DIOL, 3,4-DIMETHYL-
29	1-DIBENZOFURANCARBOXYLICACID, 1,9B-DIHYDRO-4,9B-DIMETHYL-, METHYLESTER
30	1-OCTENE, 3,4-DIMETHYL-
31	CYCLOHEXANECARBOXYLICACID, 4-(1,5-DIMETHYL-3-OXOHEXYL)-, METHYLESTER, C
32	CYCLOHEXANECARBOXYLICACID, 4-(1,5-DIMETHYL-3-OXOHEXYL)-, METHYLESTER, C
33	PHENOL, 2,2'-METHYLENEBIS-
34	PHENOL, 4,4'-METHYLENEBIS-
35	PHENOL, 4,4'-(1-METHYLETHYLIDENE)BIS-
36	HEPTADECANE
37	CYCLODODECA-1,2-DITHIOL-1-IUM, 4,5,6,7,8,9,10,11,12,13-DECAHYDRO-3-ME
38	1-PHENANTHRENECARBOXYLICACID, 1,2,3,4,4A,9,10,10A-OCTAHYDRO-1,4A-DIME
39	HEPTADECANE, 9-(2-CYCLOHEXYLETHYL)-
40	1,2-BENZENEDICARBOXYLICACID, DIISOOCTYLESTER
41	TETRACONTANE, 3,5,24-TRIMETHYL-
42	HYDROXYLAMINE, O-DECYL-
43	TRIDECANE, 6-METHYL-
44	DODECANE, 2-METHYL-

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	319	4.828	697	g	f	C_5 or acid
2	RIC	340	10.563	700	G	F	C_6 or acid
3	RIC	400	18.161	822	F	G	acid & alcohol
4	RIC	426	3.585	775	G	G	C_1-phenol
5	RIC	452	3.123	805	F	G	C_1-phenol
6	RIC	459	5.132	188	P	F	C_1-phenol
7	RIC	549	84.519	647	F	F	C_6-acid
8	RIC	598	100.000	590	F	P	alcohol
9	RIC	605	73.792	594	F	F	alcohol
10	RIC	720	30.279	464	F	G	benzene dioic acid
11	RIC	747	12.431	538	P	F	
12	RIC	754	23.554	540	P	P	
13	RIC	766	25.571	588	P	P	C_1-benzoic acid
14	RIC	771	20.275	542	P	P	alcohol
15	RIC	777	11.102	543	P	P	acid
16	RIC	787	35.514	518	P	P	
17	RIC	794	27.116	561	P	P	
18	RIC	824	43.915	558	F	P	C_7 acid
19	RIC	831	19.876	516	P	F	
20	RIC	837	5.656	508	P	G	
21	RIC	848	10.297	684	P	F	
22	RIC	881	16.731	789	F	G	C_4-benzoic acid
23	RIC	948	74.580	703	F	G	unsat. ketone
24	RIC	959	5.248	660	P	P	C_4-benzoic acid
25	RIC	1012	74.445	837	G	G	C_5-benzoic acid
26	RIC	1053	12.404	499	G	P	C_3-cyclobutanone
27	RIC	1096	10.641	728	F	G	benzothiazolone
28	RIC	1169	14.488	454	F	P	unknown
29	RIC	1194	3.985	683	F	F	methylene dimethyl phenol
30	RIC	1245	18.679	423	F	F	acid
31	RIC	1325	5.130	539	F	G	
32	RIC	1345	30.799	630	G	G	cylcohexane carboxylic acid der.
33	RIC	1362	28.522	658	G	G	methylene bis phenol
34	RIC	1416	29.364	660	G	G	
	TIC	1493	8.507	711	F	G	
36	RIC	1545	3.326	728	G	G	
37	RIC	1627	5.915	442	G	G	
38	RIC	1662	26.069	728	G	G	
39	RIC	1675	8.708	404	G	F	
40	RIC	1714	14.148	781	G	G	
41	RIC	1736	3.483	777	G	G	
42	RIC	1795	3.724	804	G	G	
43	RIC	1853	1.852	741	G	G	
44	RIC	1910	2.185	848	G	G	

RIC
05/04/82 9:55:00
SAMPLE: W#12(BH4) BN EXT 1/5000UL 200PPB D10
RANGE: G 1,3000 LABEL: N 0, 4.0 QUAN: A 0, 1.0 BASE: U 20, 3

DATA: 1266 #1
CALI: 1240 #1

SCANS 1 TO 3000



QUANTITATION REPORT FILE: 1266

DATA: 1266.TI
05/04/82 9:55:00
SAMPLE: W#12(BH4) BN EXT 1/5000UL 200PPB D10
SUBMITTED BY: A.KOVEN ANALYST: SH

AMOUNT=AREA(HGHT) * REF.AMNT/(REF.AREA(HGHT)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	BENZENE, 1,3,5-TRIMETHYL-
2	BENZENAMINE
3	3,6-OCTADECADIYNOICACID,METHYLESTER
4	OCTANE, 2,4,6-TRIMETHYL-
5	2-PROPANOL, 1-(2-METHOXY-1-METHYLETHOXY)-
6	2-PROPANOL, 1-(2-METHOXY-1-METHYLETHOXY)-
7	BENZENE, 1,2,4-TRIMETHYL-
8	BICYCLO[2.2.1]HEPTAN-2-OL, EXO-
9	BUTYRONITRILE, 4,4,4-TRIFLUORO-2-METHYL-
10	CYCLOHEXANE, (2-METHYLPROPYL)-
11	2,6-PYRAZINEDIAMINE
12	ETHANONE, 1-PHENYL-
13	BENZENE, 2-ETHYL-1,3-DIMETHYL-
14	BENZENE, 1-ETHYL-2,3-DIMETHYL-
15	BENZENEMETHANOL, .ALPHA., .ALPHA.-DIMETHYL-
16	UNDECANE
17	BENZENE, 2-ETHYL-1,4-DIMETHYL-
18	BENZENE, 1,2,4,5-TETRAMETHYL-
19	BENZENE, 1,2,3,5-TETRAMETHYL-
20	BENZENE, 1-METHYL-2-(2-PROPENYL)-
21	3-OXATRICYCLO[4.1.1.02,4]OCTANE, 2,7,7-TRIMETHYL-
22	PHENOL, 4-ETHYL-
23	HEXANE, 2,4-DIMETHYL-
24	BENZENE, (1,1-DIMETHYLPROPYL)-
25	AZULENE
26	3-CYCLOHEXENE-1-METHANOL, .ALPHA., .ALPHA., 4-TRIMETHYL-, (S)-
27	MORPHOLINE, 4-ACETYL-
28	BICYCLO[3.1.1]HEPTANE, 2,6,6-TRIMETHYL-
29	1-HEXENE, 3,5,5-TRIMETHYL-
30	PHENOL, 4-(1-METHYLETHYL)-
31	5-HEPTEN-2-ONE, 6-METHYL-
32	2-HEPTANONE, 4-METHYL-
33	OCTANE, 2,3,7-TRIMETHYL-
34	OXIRANE, 2-METHYL-2-PROPYL-
35	NAPHTHALENE, 2-METHYL-
36	UNDECANE
37	5-NONEN-4-ONE, 6-METHYL-
38	NAPHTHALENE, 1-METHYL-
39	CYCLOHEXANEMETHANOL, 4-HYDROXY-.ALPHA., .ALPHA., 4-TRIMETHYL-, MONOHYDRA
40	3-HEPTANOL, 5-METHYL-
41	CYCLOHEXANEMETHANOL, 4-HYDROXY-.ALPHA., .ALPHA., 4-TRIMETHYL-, MONOHYDRA
42	PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-, (S)-
43	OCTANE, 2,7-DIMETHYL-
44	CYCLOHEXANEMETHANOL, 4-HYDROXY-.ALPHA., .ALPHA., 4-TRIMETHYL-, MONOHYDRA
45	3-OCTANOL, 6-ETHYL-
46	UNDECANE
47	1,3,6,10-DODECATETRAENE, 3,7,11-TRIMETHYL-, (Z,E)-
48	NAPHTHALENE, 1,7-DIMETHYL-
49	ETHANONE, 1-CYCLOPENTYL-
50	2-OXAZOLIDINONE, 3-(2-HYDROXYPROPYL)-5-METHYL-

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
1	RIC	305	0.877	941	F	G	C_3-benzene
2	RIC	325	1.690	946	G	G	aminobenzene
3	RIC	335	13.947	446	P	G	C_3-benzene
4	RIC	342	5.742	929	F	G	H/C (hydrocarbon)
5	RIC	356	0.775	653	F	G	solvent
6	RIC	362	2.459	876	F	G	solvent
7	RIC	370	3.097	650	G	G	C_3-benzene
8	RIC	377	0.994	610	G	G	C_4-cyclohexene
9	RIC	386	2.383	529	P	P	unknown
10	RIC	394	21.161	765	G	G	H/C
11	RIC	414	18.632	638	P	P	unknown
12	RIC	429	0.713	559	F	G	ketone
13	RIC	440	2.845	513	P	G	C_4-benzene
14	RIC	448	2.016	875	F	G	C_4-benzene
15	RIC	460	53.632	733	G	G	alcohol
16	RIC	466	9.885	964	G	G	H/C
17	RIC	473	1.073	835	P	G	C_4-benzene
18	RIC	485	3.782	788	F	G	C_4-benzene
19	RIC	490	4.194	923	F	G	C_4-benzene
20	RIC	512	2.178	627	F	G	C_4-benzene (unsaturated)
21	RIC	521	17.082	737	P	F	C_3-bicylcoheptan-2-one
22	RIC	542	4.300	451	F	G	C_2-phenol
23	RIC	549	0.828	580	P	G	H/C
24	RIC	556	1.240	714	P	G	C_5-benzene
25	RIC	565	8.698	943	F	G	or napthalene
26	RIC	580	20.468	792	F	G	unsaturated alcohol
27	RIC	590	1.340	870	F	G	4 acetyl morpholine
28	RIC	595	4.382	644	F	F	C_2-bicyloheptane-2-one
29	RIC	600	5.757	728	F	G	H/C unstaturated
30	RIC	606	1.997	629	F	F	C_3-phenol
31	RIC	619	3.186	797	F	G	H/C ketone
32	RIC	640	1.539	400	P	F	C_3-indene ($C_{12}H_{16}$)
33	RIC	665	4.601	902	F	G	H/C
34	RIC	671	3.181	619	P	G	2-methy-cylcopentanol acetate
35	RIC	689	1.561	882	G	G	C_1-napthalene
36	RIC	696	10.327	901	G	G	H/C
37	RIC	703	19.875	586	P	F	H/C ketone
38	RIC	708	8.894	576	P	G	C_1-napthalene
39	RIC	717	56.698	794	F	G	H/C alcohol
40	RIC	725	1.445	642	P	P	H/C alcohol
41	RIC	739	13.157	760	F	G	H/C alcohol
42	RIC	754	8.100	699	G	G	NICOTINE!!!
43	RIC	763	1.602	876	P	G	H/C
44	RIC	774	13.632	743	P	G	H/C alcohol
45	RIC	785	6.529	610	G		H/C alcohol
46	RIC	801	17.287	872	G	G	H/C
47	RIC	813	3 075	584	P	F	H/C
48	RIC	822	1.944	756	P	G	C_2-napthalene
49	RIC	833	1 197	527	P	P	unknown
50	RIC	859	10 893	806	P	G	

NO	NAME
51	DODECANE, 2, 6, 11-TRIMETHYL-
52	ACENAPHTHYLENE, 1, 2-DIHYDRO-
53	UNDECANE, 4, 7-DIMETHYL-
54	PHENOL, 2, 6-BIS(1, 1-DIMETHYLETHYL)-4-METHYL-
55	[1, 1'-BIPHENYL]-2-OL
56	NAPHTHALENE, 2, 3, 6-TRIMETHYL-
57	OCTANE, 2, 7-DIMETHYL-
58	9H-FLUORENE
59	HEPTADECANE
60	BENZENAMINE, N-PHENYL-
61	HEPTADECANE
62	UNDECANE, 4-METHYL-
63	23535BC BLOOD
64	HEPTADECANE
65	PENTADECANE, 2, 6, 10, 14-TETRAMETHYL-
66	23535BC BLOOD
67	ANTHRACENE
68	DODECANE
69	DODECANE, 2, 6, 11-TRIMETHYL-
70	2-NAPHTHALENEMETHANOL, DECAHYDRO-. ALPHA. , . ALPHA. , 4A, 8-TETRAMETHYL-, DI
71	9H-CARBAZOLE
72	DECANE, 2, 7, 7-TRIMETHYL-
73	HEPTADECANE, 2, 6, 10, 14-TETRAMETHYL-
74	1, 5-CYCLOUNDECADIENE, 9-(1-METHYLETHYLIDENE)-
75	4H-CYCLOPENTA[DEF]PHENANTHRENE
76	1, 5-CYCLOUNDECADIENE, 9-(1-METHYLETHYLIDENE)-
77	SILANE, (DODECYLOXY)TRIMETHYL-
78	BENZO[G]PTERIDINE-2, 4(3H, 10H)-DIONE, 8-HYDROXY-7, 10-DIMETHYL-
79	SILANE, (DODECYLOXY)TRIMETHYL-
80	OCTACOSANE
81	SULFUR, MOL. (S8)
82	PYRENE
83	HENEICOSANE
84	PYRENE
85	ETHANONE, 1, 1'-(6-HYDROXY-2, 7-BENZOFURANDIYL)BIS-
86	HEPTADECANE
87	HEPTADECANE, 2, 6, 10, 14-TETRAMETHYL-
88	HENEICOSANE
89	HEPTADECANE
90	HENEICOSANE
91	NONANE, 3-METHYL-5-PROPYL-
92	HENEICOSANE
93	1, 2-BENZENEDICARBOXYLICACID, DIISOOCTYLESTER
94	HENEICOSANE
95	HEPTADECANE
96	HENEICOSANE
97	1, 2-BENZENEDICARBOXYLICACID, MONOBUTYLESTER
98	OCTANE, 2, 4, 6-TRIMETHYL-
99	HENEICOSANE
100	HEPTADECANE
101	6H-DIBENZO[B, D]PYRAN-1-OL, 3-HEXYL-6A, 7, 8, 10A-TETRAHYDRO-6, 6, 9-TRIMET
102	HYDROXYLAMINE, O-DECYL-
103	HYDROXYLAMINE, O-DECYL-
104	DODECANE, 1, 2-DIBROMO-
105	1-HEPTANOL, 2-PROPYL-
106	UNDECANE, 2, 4-DIMETHYL-

NO	M/E	SCAN	AMOUNT	Pur.	Sep.	Mat.	Comments
51	RIC	864	8.766	810	F	G	H/C
52	RIC	887	2.744	914	G	G	C_2-napthalene
53	RIC	901	15.892	877	G	G	H/C
54	RIC	919	5.400	542	P	G	(mixture) C_9-phenol+dibenzofuran
55	RIC	925	2.656	642	G	G	biphenyl alcohol
56	RIC	950	4.201	496	P	G	C_3-napthalene
57	RIC	961	2.735	780	F	G	H/C
58	RIC	983	11.961	715	G	G	0-biphenylenemethane
59	RIC	996	13.103	912	G	G	H/C
60	RIC	1024	0.735	715	P	G	N-phenyl benzenamine
61	RIC	1040	6.060	850	F	G	H/C
62	RIC	1053	1.191	445	P	P	H/C+alkyl thiophene($C_{12}H_{20}S$)
63	RIC	1061	3.286	800	P	G	biological???
64	RIC	1086	7.648	887	P	G	H/C
65	RIC	1091	10.790	901	P	G	
66	RIC	1115	4.665	553	P	P	benzenesulfonamide?
67	RIC	1162	19.533	951	G	G	628 ppb compared to D_{10} int. std.
68	RIC	1173	5.410	780	P	G	H/C
69	RIC	1180	6.400	843	P	G	H/C
70	RIC	1195	1.374	555	P	G	small peak
71	RIC	1216	3.180	813	P	G	o-biphenyleneamine
72	RIC	1248	1.180	609	F	F	H/C
73	RIC	1255	5.148	551	P	G	H/C + C_1-phenanthrene
74	RIC	1268	5.895	432	P	F	H/C + PAH
75	RIC	1273	1.412	700	F	G	PAH
76	RIC	1282	10.296	419	P	F	H/C + PAH
77	RIC	1299	3.372	502	P	P	phenanthrene carboxylic acid
78	RIC	1306	1.656	238	P	P	unknown
79	RIC	1313	7.369	512	G	G	dodecyloxy trimethyl silane
80	RIC	1336	6.686	490	G	G	H/C
81	RIC	1378	100.000	544	G	G	sulphur or sulphur dioxide
82	RIC	1388	6.452	900	G	G	PAH
83	RIC	1408	5.169	851	G	G	H/C
84	RIC	1425	3.783	952	G	G	PAH
85	RIC	1430	0.911	436	F	F	olean-12-ene($C_{30}H_{50}$)
86	RIC	1480	12.734	887	G	G	H/C
87	RIC	1504	1.940	852	F	G	H/C
88	RIC	1549	25.176	901	G	G	H/C
89	RIC	1559	2.278	707	F	G	H/C
90	RIC	1616	32.845	908	G	G	H/C
91	RIC	1655	1.413	617	P	G	H/C
92	RIC	1680	31.365	906	G	G	H/C
93	RIC	1720	57.126	812	G	G	phthalate
94	RIC	1742	23.671	898	G	G	H/C
95	RIC	1778	1.759	738	P	G	H/C
96	RIC	1802	14.734	901	G	G	H/C
97	RIC	1832	2.772	264	P	G	phthalate
98	RIC	1840	0.827	861	P	G	H/C
99	RIC	1864	9.450	861	G	G	H/C
100	RIC	1926	6.435	850	G	G	H/C
101	RIC	1956	3.026	692	F	G	phthalate
102	RIC	1991	3.002	832	G	G	H/C
103	RIC	2070	1.809	845	G	G	H/C
104	RIC	2109	0.571	386	F	G	phthalate
105	RIC	2164	0.911	811	G	G	H/C
106	RIC	2200	0.223	849	G	G	H/C

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